Defence Construction Canada

Spill Contingency Plan
Cape Hooper (FOX-4) DEW Line Site

Prepared by:

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This Statement of Qualifications and Limitations is attached to and forms part of the Report.

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1. Management of the Site

The site is owned by the Department of National Defence (DND), as represented by Defence Construction Canada (DCC). A contact list is provided in the following Table.

Table 1: Contact List

Organization	Name	Number
Defence Construction Canada	Imad Jaradat, Associate Project Manager	613-996-1094
Defence Construction Canada	Steven Poaps, Deputy Project Manager	613-943-7950
Environment Canada		867-979-1660
Department of Fisheries and Oceans		867-979-8000
Government of Nunavut – Department of Environment		867-975-7700
Qikiqtani Inuit Association		867-975-8400
INAC Manager of Field Operations		867-975-4295

1.1 Roles and Responsibilities

All workers at the site will be involved in spill response actions in the event of a spill during the construction activities at FOX-4. Specific roles and responsibilities are described as follows:

1.1.1 Contractor's On-Site Manager

- Activates the Spill Contingency Plan (SCP) based on the assessment of the spill.
- 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 and disposal.
- Document chronology of spill event and clean-up efforts.
- Provides liaison and maintains effective line of communication with DCC Contract Coordinator.
- Ensure that all phases of the SCP are appropriately implemented.
- Ensure 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.
- Provide the DCC Contract Coordinator 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 clean up action is initiated.
- Ensure the response crew members are appropriately trained.
- Practise spill prevention by performing regular maintenance on all fuel systems and by using proper methods for handling of fuel products.
- Provide personnel, materials, and equipment necessary for adequate response to fuel and hazardous material spills.
- Establish communications and verbally report all spills to the DCC Contract Coordinator as soon as practical.
- Isolate and eliminate all ignition sources.
- Ensure safety and security at the spill site.
- Stop or reduce discharge, if it is safe to do so.

- Make every effort to contain the spill by dyking with earth or other barriers on land and containment booms on water.
- Assess potential for fuel/chemical recovery.
- Hire additional assistance, if required, from northern residents, local communities, and commercial spill response firms.
- If required, request assistance from the DND (through the DCC Contract Coordinator) and the Canadian Coast Guard.
- Follow all guidelines and regulations for disposal of spilled materials, associated debris, contaminated soil and water as established by appropriate government agencies.
- Assess potential terrain and wildlife disturbance, erosion and archaeological site disturbance in any areas to be affected by clean up operations and contact relevant authorities.
- Document all events/actions.

1.1.2 DCC Contract Coordinator

- Review spill report and actions taken for containment, recovery and clean up and recommend changes as required.
- Reviews all incident reports.
- Acts as company spokesperson with government agencies, media and all other outside organizations.
- Completes internal spill notification within DCC.

2. Spill Response Procedures

2.1 Reporting Procedures

When reporting a spill to the 24 Hour Spill Report Line and completing the Spill Report Form, the following information shall be included:

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

In addition to providing a spill report to the Spill Report Line, a copy of the report is to be submitted to the INAC Water Resources Officer no later than 30 days after initially reporting the spill to the spill report line. The contact list is provided in Section 4.1.

3. Clean Up Action Plan

In the event of a spill, protection of human health and safety is paramount. Contamination of personnel involved in a clean up is a real possibility, as is contamination of the surrounding workplace and environment.

The individual discovering a spill shall:

- Warn the people in the immediate vicinity and evacuate if necessary.
- Isolate or remove any ignition sources.
- Identify the spilled material, if possible, and take all safety precautions before approaching it.
- Locate the source of the spill.
- Attempt to stop the leakage and contain the spill, if safe to do so.
- Assess the likely size, extent and condition of the spill.
- Report to the DCC Contract Coordinator the spill location, type of material, volume and extent, status of spill (direction of movement), and prevailing meteorological conditions.
- In the event of a shoreline spill, provide information about the beach location, contaminated area, beach characteristics, presence of wildlife and archaeological sites that may be threatened.

Once the DCC Contract Coordinator has been contacted and arrives at the spill site, the following actions are to be taken:

- Assess the severity of the spill via direct observation and/or information from communications.
- Deploy equipment and personnel to initiate containment and clean-up.
- Prepare the Spill Report Form.
- Notify all other pertinent parties, including the DND and other government agencies.

3.1 General Procedures

The environmental protection measures outlined in the following section are to be taken by all workers on site to reduce the chance of environmental impairment due to a spill, release or other incident. The following general clean up procedures shall apply for all spill areas:

- Wear protective clothing as required for handling spills.
- Contain spills on soil or rock by construction of earthen dykes using available material. If soil is not available, place sorbent material or a boom in the path of the spill. As the sorbent barrier becomes saturated, continually replace it. Fuel or other liquids lying in pools, trenches or in specially constructed troughs are to be removed with pumps, buckets or skimmers.
- If the ground is snow-covered, create snow dykes and line with a chemically compatible liner for containment and recovery of liquid.
- For fuels on water, deploy containment booms and recover as much fuel as possible with a work boat and skimmer if the area has less than 1/10 ice cover. If the area is ice infested, burn any fuel spills using igniters.
- Apply sorbents if necessary.
- Assess potential for disturbance of wildlife, fish and archaeological sites by spill or clean-up operations and notify the relevant authorities.
- Notify environmental authorities to discuss disposal and clean-up options.
- Conduct required clean-up operations.
- Assess and appropriately treat any areas disturbed by clean-up activities.
- Ensure the site has been completely restored and leave the site only when all work is finalized.

3.2 Procedures for Fuel Storage Areas

In order to prevent spills or accidents at fuel storage areas, the following procedures apply:

- Avoid sites that slope towards waterways or other environmentally sensitive areas, exhibit ponding or flooding, have high groundwater tables, and/or excessive seepage or ice-rich (thaw sensitive) soils.
- Avoid archaeological resources.
- Conduct fuelling and equipment lubrication in a manner that avoids spillage of fuels, oils, greases and coolants. When refuelling equipment, operators are to use leak-free containers, reinforced rip and puncture proof hoses and nozzles, and drip trays. Operators are to be in attendance for the duration of the refuelling operation and are to ensure that all storage container outlets are properly sealed after use.
- Store fuel in self-dyking containers, or position over an impervious liner and surround by an impervious dyke of sufficient height to contain not less than 110% of the capacity of the tank(s).
- Smoking is prohibited within 7.5 m of the fuel storage facility. Provide appropriate signage.
- Inspect fuel storage facilities at least once each week for the duration of the project. Fire-fighting equipment is to be made available for immediate access at each and every fuel storage facility.
- Store all barrels containing fuel and/or other hazardous materials in an elevated position either on their side with the bungs facing the 9 and 3 o'clock position or on pallets, upright, banded and encased in overpack containers.
- All barrels shall be individually identified. The label is to be to industry standards and should provide all information necessary for health and safety, and environmental purposes. Material Safety Data Sheets for all materials maintained in the construction camp will be available for all personnel.
- Treat all waste petroleum products, including used oil filters, as hazardous material and handle and dispose as per the requirements specified in the appropriate regulations.
- Conduct regular inspections of all machinery hydraulic, fuel and cooling systems. Repair leaks immediately.
- Pre-assemble and maintain emergency spill response equipment including at least two fuel pumps, empty 200 litre barrels and absorbent material sufficient to clean up a 1000 litre spill at all permanent fuel storage sites.
- Remove all barrels, redundant fuel storage sites and associated materials and equipment from the site at the conclusion of the work.

3.3 Procedures for Hazardous Material Storage Areas

Hazardous waste materials are wastes or materials that are designated as "hazardous" under Nunavut or Federal legislation; or as "dangerous goods" under the Transportation of Dangerous Goods Act (TDGA). The Canadian Environmental Protection Act (CEPA) regulates material containing PCBs at greater than 50 ppm. The hazardous material storage areas are to be managed as outlined below:

- Hazardous waste materials may be encountered during sorting of site and demolition debris and during the excavation of landfills. Collect and sort hazardous materials using equipment suitable for the task.
- Locate the hazardous material processing area a minimum of 100 metres from the nearest archaeological site or water body, on ice poor, well drained soil, and as close to the location of work as possible.
- Control movement of vehicles and equipment between the hazardous materials processing area and work site to prevent the spread of potentially hazardous material along roadways.
- Store hazardous materials so that each storage area is separated from the nearest water body by a 30 metre buffer zone.
- The TDGA and the International Air Transport Association (IATA) Dangerous Goods Regulations govern the packaging and shipment of hazardous goods within Canada. If shipping out of Canada, Canadian regulations and the regulations of the destination country both apply. Requirements of the IMDGC must be addressed in international waters.
- Any material classified as hazardous by the TDGA must be accompanied by the appropriate TDGA shipping documents. The documents are to state the shipper, the receiver and all carriers involved in the transport of the

shipment. Non-hazardous materials are also to be accompanied by a document indicating ownership and responsibility of the receiver.

- Package all hazardous material in accordance with the TDGA regulations.

4. Disposal

All soil impacted by fuel spills is to be treated within the landfarm on-site. Any soils impacted by hazardous material are to be packaged and transported off-site for disposal at a licensed facility. Soils impacted by sewage effluent do not require disposal and will be left in place.

5. Spill Response Training

All personnel are to be formally trained by the Contractor. The training is to be comprised of all pertinent spill emergency response issues and will include, but not be 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);
- Dealing with seasonal diversities and adverse weather conditions in the context of spill response;
- Personal protective equipment;
- Properties of hazardous materials handled, stored and used on-site;
- Supervisors shall have completed contract-required the training requirements;
- Environmental legislation; and
- Company policy.

Training records are to be maintained at the Cape Hooper site office.

6. Equipment Inventory

The following equipment (or similar) will be available on-site:

Table 2: Equipment

Description
Rock truck
Loader
Excavator
Grader
Dozer
Fuel truck
Water truck
Mack truck
15 passenger van
Pick-up trucks
Incinerator
Generator
Sterling truck
Roll off
Backhoe
Compactor
Rock truck
Drill
Tanker trailer
Dumper
RPM 227 Loader mounted Snow Blower

Spill response kits are located on-site. These kits should be in marked packages at visible and accessible locations. As a minimum requirement, each spill kit should include the following items:

Table 3: Spill Kit

Description
205 L gauge open top drum with cover, bolt ring and gasket
48” x 48” x 1/16” neoprene pad (drain stop/plug)
Splash protective goggles
PVC oil resistant gloves
Package polyethylene disposable bags (5 mm) 10 per pack
Shovel (spark proof)
Case (T-12) 3” x 12’ mini-booms/case
Bag (HP-256) 17” x 19” x ½” pads, 100 pads/bail
Bag of sphag sorp TM

Appendix A

Site Plan

LANDS OUTSIDE OF THE BOUNDARIES ARE UNDER DIAND JURISDICTION

Monument

Custodian: DIAND

Road
Land Reservation to DND

PARCEL A

Custodian: DND

Radar Site
Transfer of Administration

PARCEL B

PARCEL E

PARCEL D

Custodian: DND

Water Lot
Transfer of Administration

Custodian: DND

Runway
Transfer of Administration

PARCEL C

RESERVED FOR DND

Custodian: DND

Beachhead
Transfer of Administration

Custodian : DIAND

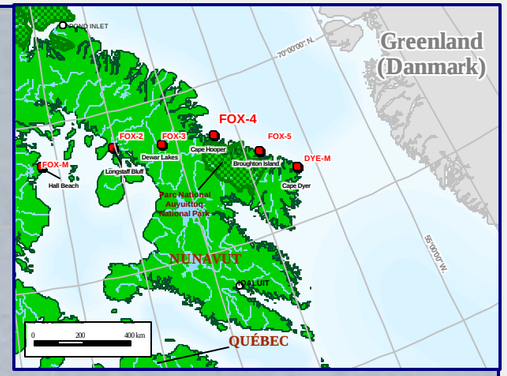
Reserve requested by DND 56/01/18
Established by DIAND 56/01/26

75 96000m. N.

75 92000m. N.

594000m. E.

586000m. E.



Version 2.0

FOX-4

CAPE HOOPER

FINAL

- Reserved for DND / Réservé pour le MDN
- Parcel A / Parcelle A
- Parcel B / Parcelle B
- Parcel C / Parcelle C
- Parcel D / Parcelle D
- Parcel E / Parcelle E
- National Park / Parc National

Background information : Topographic map 27 A (Scale: 1: 250 000). UTM Zone 19.
Produced by the Surveys and Mapping Branch
Department of Energy, Mines and Resources, Ottawa, 1980.

Carte de base : carte topographique 27 A (Échelle 1 : 250 000). Zone UTM 19.
Publié par la Direction des levés et de la cartographie
Ministère de l'énergie, des mines et des resources, Ottawa, 1980.

N W E S

Scale / Échelle : 1 : 27 500

0 1 2 km

This map is to be used for presentation purposes only.
This map is not a legal survey document.

Cette carte devrait être utilisé à des fins de présentation seulement.
Cette carte n'est pas un document d'arpentage légal.

Produced by: Real Property Geomatics Services, Real Property Services Branch, PWGSC, March, 2003.
Produit par: Services géomatiques immobiliers, Service des biens immobiliers, TPSGC, mars 2003.

Appendix B

Spill Report Form

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
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 ENVIRONMENT
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS		

L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE

REPORT LINE USE ONLY

N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130

LEAD AGENCY ☐ EC ☐ CCG ☐ 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			