

General Note:

1. ALL NON-HAZARDOUS WASTE FROM UPPER AREA NON-HAZARDOUS WASTE LANDFILL.
2. ALL NON-HAZARDOUS WASTE FROM LOWER AREA NON-HAZARDOUS WASTE LANDFILL.
3. ALL WASTE FROM ACCESS ROAD TO BE PLACED IN WASTE SITE NON-HAZARDOUS WASTE LANDFILL.

Legend:

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

NO.	DATE	REVISION	REVISION	APPROVED

DRAFT

UNO
 Broughton Island
 DEW LINE CLEAN UP

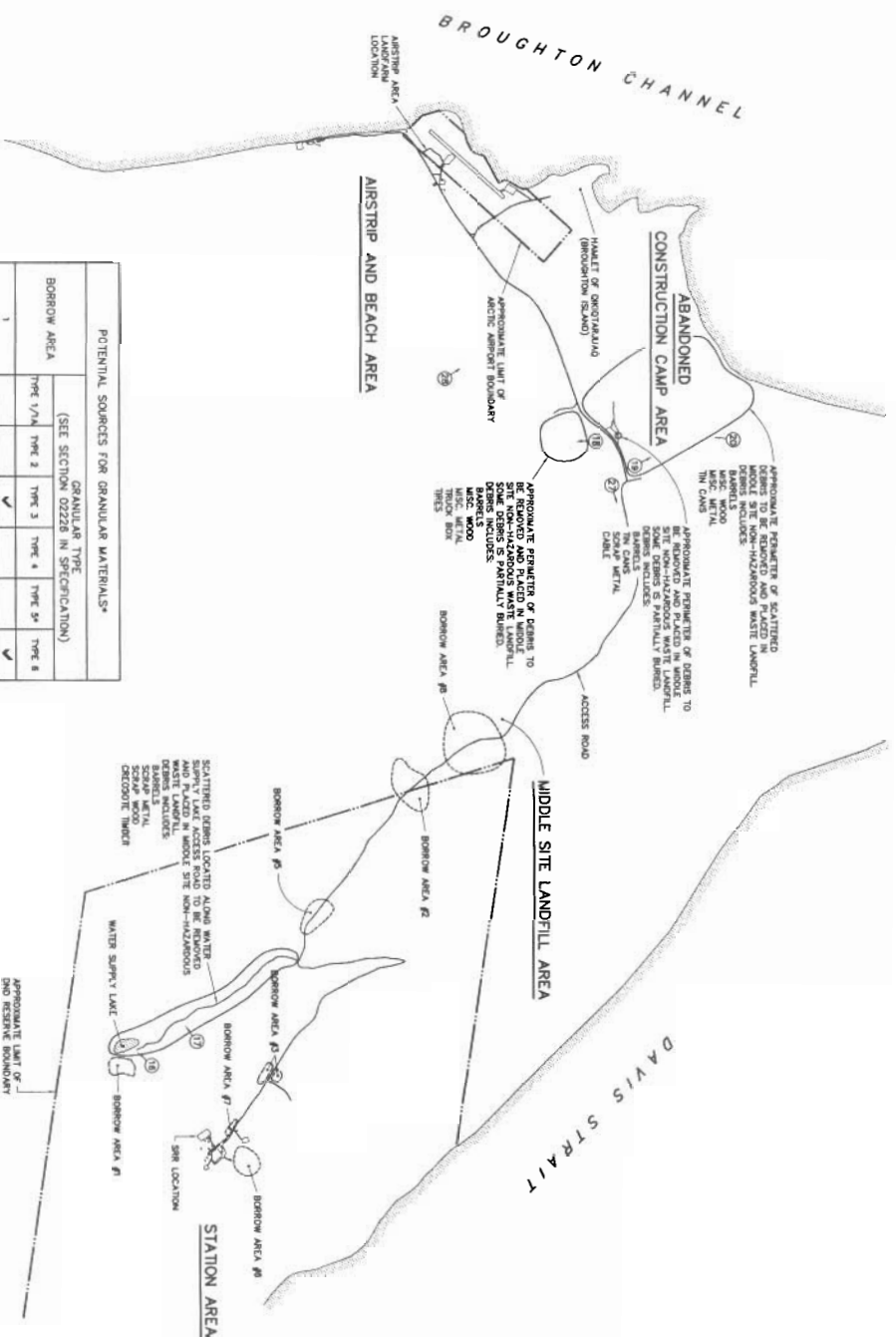
SCALE - 1:5000
 PROJECT - Broughton Island
 DRAWING - DEW LINE CLEAN UP

DATE
 2003-01-14

SHEET - 1 OF 1
 2003-01-14

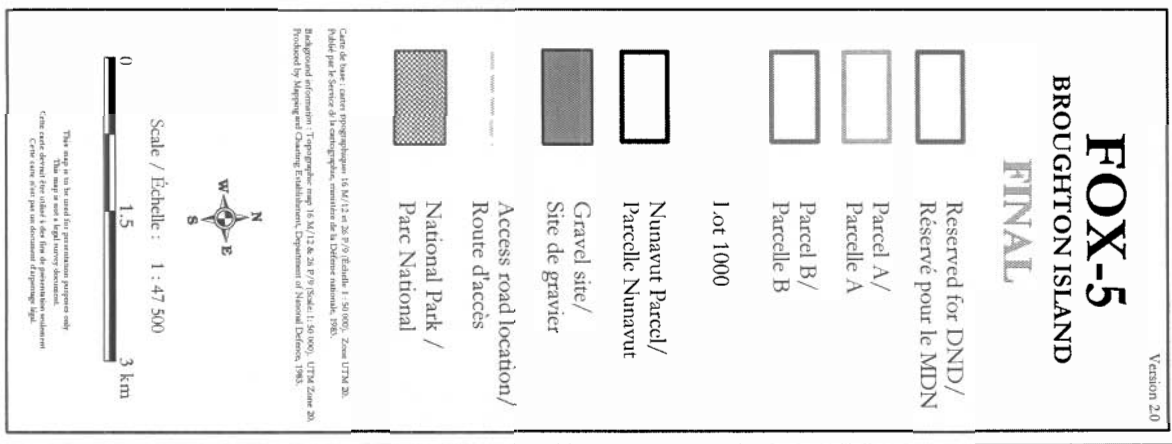
OVERALL SITE PLAN

FUNCTION	CONTRACTOR - RESPONSIBILITY
DESIGN	DESIGN
CONSTRUCTION	CONSTRUCTION
OPERATION	OPERATION
MAINTENANCE	MAINTENANCE
REPAIR	REPAIR
REPLACE	REPLACE
REMOVE	REMOVE
DISPOSE	DISPOSE
RECYCLE	RECYCLE
REUSE	REUSE
REPAIR	REPAIR
REPLACE	REPLACE
REMOVE	REMOVE
DISPOSE	DISPOSE
RECYCLE	RECYCLE
REUSE	REUSE



POTENTIAL SOURCES FOR GRANULAR MATERIALS*						
BORROW AREA	(SEE SECTION 02228 IN SPECIFICATION)					
	TYPE 1/2A	TYPE 2	TYPE 3	TYPE 4	TYPE 5A	TYPE 6
1			✓			✓
2			✓			✓
3	✓		✓			✓
4			✓			✓
5			✓			✓
6	✓		✓			✓
7			✓			✓
8	✓		✓			✓
UNDESIGNATED FILL						

* REFER TO GEOTECHNICAL INFORMATION IN APPENDIX E IN SPECIFICATION.



Contingency Plan for the FOX-5, Broughton Island DEW Line Site

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Nunavut Water Board

Prepared by:
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July 2003

File: FOX-5 3.6

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1. INTRODUCTION

The following contingency plan presents the prescribed course of action to be taken in the case of unanticipated spill events during the clean up of the FOX-5 site. The plans will enable persons in a particular contingency situation to maximize the effectiveness of the environmental protection response and meet all regulatory requirements for reporting to the appropriate authorities. This plan is an integral part of the Environmental Protection Plan (EPP), which is a part of the formal contract documents with the Contractor(s).

1.1 Scope and Purpose

This plan applies to all activities and facilities pertaining to the clean up activities at the FOX-5 site.

The purpose of the plan is to:

- Provide a clear statement of the procedures to be followed in response to all spills;
- Minimize the potential environmental impact of spills by establishing pre-determined action plans;
- Establish a state of preparedness for personnel through a Spill Response Training Program;
- Protect the health and ensure the safety of the personnel involved in the Spill Response activities, and the local communities;
- Provide a reporting network for spills;
- Ensure site restoration through appropriate remedial activities;
- Identify the roles and responsibilities of all parties involved in Spill Response activities; and,
- Identify sufficient personnel, materials and equipment needed to make an adequate response to a spill.

2. RESPONSE ORGANIZATION

2.1 Roles and Responsibilities

The Contractor and all sub-contractors will be involved in Spill Response Actions in the event of a spill during the clean up activities at FOX-5. Their roles and responsibilities are described as follows:

- Ensure response crew members are appropriately trained;
- Practise spill prevention by performing regular maintenance on all fuel systems and by using proper methods for the 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 Site Supervisor as soon as practical;
- Isolate and eliminate all ignition sources;
- Ensure safety and security at the spill site;
- Stop or reduce discharge, if 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;
- Deploy on-site crews to mobilize pumps, empty 200 L drums, hand tools and absorbents to the spill site;

- Hire additional assistance, if required, from northern residents, local communities, and commercial spill response firms;
- Request assistance, if required, from DND (through the site Supervisor) 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;
- Report the spill to the Spill Report Line and follow up with a written spill report. This report shall summarize the initial report information; confirmation of spill volume, actions taken, future remediation/monitoring requirements; and a sketch map and/or photographs of the spill area.
- For spills on water, immediately mobilize additional containment and clean up equipment in consultation with the Coast Guard, Environment Canada and Fisheries and Oceans Canada if on-site equipment is inadequate. Close isolation valves to stop fuel flow, if required. Deploy light-weight booms and oil absorbent materials to protect environmental resources along the coastline, as applicable. Track the progress of the spill, if of unknown origin.

Please see the organizational structure of the response team in Figure 1 following this section.

Telephone, facsimile machines and e-mail are provided to on-site personnel to maintain communications with off-site parties. All intra-site communications occur via two-way radios. All on-site personnel are provided with radios. Table 1 provides all other contact numbers.

NOTE: The telephone and facsimile numbers, and the e-mail address's are not available at this time, as work at the site has not commenced for this year. Once these numbers and addresses are established, they will be forwarded to the Nunavut Water Board.

Table 1: Contact List

Resource	Location	Phone No.
24 Hour Spill Line	NWT/Nunavut	867-920-8130
Iqaluit Fire Department	Nunavut	867-979-4422
Environment Canada, Enforcement Branch	Head of Enforcement – Craig Broome	867-669-4730
Indian and Northern Affairs Canada	Director of Operations (Iqaluit) – Stephen Traynor	867-975-4546
Renewable Resources Officer Stations – Baffin Region	Iqaluit	867-979-5017
	Qikiqtarjuaq	867-927-8966
GN Environmental Protection	Iqaluit; contact Earle Baddalo	867-975-5910
Department of National Defence through the contracting agency Defence Construction Canada	Environmental Officer – Scott Hamilton	613-998-4583
	Deputy Project Manager – Scott Munn	613-990-9641
	Project Manager – Daniel Paquet	613-998-9523

3. INITIAL ACTION

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:

1. Warn people in the immediate vicinity and evacuate the area if necessary.
2. Isolate or remove any ignition sources.
3. Identify the spilled material, if possible, and take all safety precautions before approaching it.
4. Locate the source of the spill;
5. Attempt to immediately stop the leakage and contain the spill, if safe to do so.
6. Assess the likely size, extent and condition of the spill.
7. Report to the Site Supervisor the spill location, type of material, volume and extent, status of spill (direction of movement), and prevailing meteorological conditions.
8. In the event of a shoreline spill, provide information about beach location, contaminated area, beach characteristics, presence of wildlife and archaeological sites which might be threatened.

Once the Site Supervisor has been contacted and arrives at the spill site, the following actions are to be taken:

1. Assess the severity of the spill via direct observation and/or information from communications;

2. Deploy equipment and personnel to initiate containment and clean up;
3. Prepare the Government of the Northwest Territories Spill Report Form;
4. Notify all other pertinent parties, including the Owner of the site, and other Government agencies.

Please see Figure 2, which outlines the initial response actions to be followed in the event of a spill. Figures 3 and 4 outline the specific response procedures to be followed in the event of spills on land and water, respectively.

4. REPORTING PROCEDURE

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

- Date and time of spill;
- Location of spill;
- 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 spill;
- Whether spill is continuing or has stopped;
- Description of existing containment;
- Action taken to contain, recover, clean up and dispose of spilled contaminant;
- Name, address and phone number of person reporting the spill; and,
- Name of owner or person in charge, management or control of contaminants at the time of the spill.

Government of the Northwest Territories SPILL REPORT (Phone: 867-920-8130)		
A	Report Date:	Date and Time of Spill, if Known:
B	Location and Map Coordinates (if known) and Direction if Moving	
C	Party Responsible	
D	Product Spilled and Estimated Quantities (Provide Metric Volumes/Weights if possible)	
E	Cause of Spill	
F	Is Spill Terminated or Continuing	
G	Extent of Contaminated Area	
H	Factors Affecting Spill or Recovery – Temperature, Wind, Snow, Ice, Terrain, Buildings, etc.	
I	Containment – Natural, Booms, Dykes, or Other. No Containment.	
J	Action, if any, Taken or Proposed to Contain, Recover, Clean-up or Dispose	
K	Do You Require Assistance?	If so, What Form?
L	Hazard to Persons or Property or Environment – Fire, Drinking Water	
M	Comments or Recommendations	
Reported by:	Position, Employer, Location	Telephone:
Reported to:	Position, Employer, Location	Telephone: