

Spill Contingency Plan

Introduction

The following contingency plan presents the prescribed course of action to be taken in the case of unanticipated spill events during the investigation of the FOX-3 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.

Scope and Purpose

This plan applies to all activities and facilities pertaining to the construction activities at the FOX-3 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 training;
- Protect the health and ensure the safety of the personnel involved in the spill response activities;
- Provide a reporting network for spills;
- Ensure site restoration through appropriate remedial activities;
- Identify the roles and responsibilities of all parties involved in the spill response activities; and,
- Identify sufficient personnel, materials and equipment needed to make an adequate response to a spill.

Roles and Responsibilities

The outfitter contractor will be involved in spill response actions in the event of a spill during the site investigation activities at FOX-3. Their roles and responsibilities are described as follows:

- Ensure the team members are appropriately trained.
- Practice 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 spills.
- Establish communications and verbally report all spills to the Owner (DND) 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.
- Assess potential for fuel/chemical recovery.
- Deploy on-site crews to mobilize pumps, empty 200 litre barrels, hand tools and absorbents to the spill site.
- Hire additional assistance, if required, from northern residents, local communities, and commercial spill response firms.
- If required, request assistance from the DND.
- 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.

Telephone, facsimile machines and e-mail are provided to on-site personnel to maintain communications with off-site parties. All on-site personnel are provided with two-way radios for all intra-site communications. Table 1 provides all other contact numbers. **NOTE: The telephone and facsimile numbers and the e-mail addresses for the outfitter contractor are not available at this time as the contract has yet to be awarded.**

Table 1: Contact List

Resource	Location	Phone No.
24 Hour Spill Line	NWT/Nunavut	867-920-8130
Environment Canada	Environmental Protection Branch	867-669-4700
Government of Nunavut – Environmental Protection	Iqaluit	867-975-5907
Indian and Northern Affairs Canada – Water Resources Manager	Nunavut Regional Office	867-975-4550
Indian and Northern Affairs Canada – Land Administration Minister	Nunavut Regional Office	867-975-4280
Department of Fisheries and Oceans	Nunavut Regional Office	867-975-8000
Defence Construction Canada (representatives for the Department of National Defence)	Environmental Officer – Phil Warren	613-998-7288
	Deputy Project Manager – Scott Munn	613-990-9641
	Project Manager – Daniel Paquet	613-998-9523

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:

- Warn 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 immediately 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 Owner 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 beach location, contaminated area, beach characteristics, presence of wildlife and archaeological sites that may be threatened.

Once the Owner or Owners representative 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 Government of the Northwest Territories Spill Report Form.
- Notify all other pertinent parties, including the DND and other Government agencies.

Reporting Procedure

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 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.

Action Plan

Gasoline and diesel fuel could potentially be spilled at the FOX-3 site. MSDS and other information on fuel materials are to be provided by the contractor once the clean up activities begin.

Environmental Protection Measures

The environmental protection measures outlined in the following sections are to be taken by all workers on-site to reduce the chance of environmental impairment due to a spill, release or other accident.

General Procedures

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.
- If the ground is snow-covered, create snow dykes and line with a chemically-compatible liner for containment and recovery of liquid.
- 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.

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 in a manner that avoids spillage of fuels. When refueling 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 refueling 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 metres 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 will 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.
- 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.
- Pre-assemble and maintain emergency spill response equipment including a fuel pump, empty 200 litre barrels and absorbent material sufficient to clean up a 200 litre spill at all permanent fuel storage sites.
- Removal all barrels, redundant fuel storage sites and associated materials and equipment from the site at the conclusion of the work.

Spill Recovery Success

In order to determine whether a spill has been successfully remediated, samples of soil and/or water are to be collected and tested for the chemical parameters contained in the spill material. If concentrations of the spill chemicals are not detected, or are at concentrations below the applicable Territorial, CCME, or DLCU criteria, the spill clean up will be determined a success.

Environmental Mapping

The attached drawings show the overall site plan and the project layout, which identify the locations of site facilities and the work areas. Once the camp is established, the locations of all spill response equipment will be noted and provided to on-site personnel.

Resource Inventory

The following equipment is typically found on-site during a clean up program. The exact type of equipment found at the FOX-3 site may vary slightly.

- Oil absorbent materials
- Salvage/storage drum
- 2 shovels
- rubber lined gloves

- 1 wheelbarrow or trailer for removal of impacted soils

All equipment is generally stored at the camp area where the fuel is stored. Some equipment may be stored in the area in which the equipment is being used.

Training and Exercises

Training is provided by the outfitter contractor and typically includes the following:

- Spill awareness and prevention;
- Reporting procedures and initial responses;
- Spill response kit familiarization;
- Clean up and methods;
- Occupational health and safety; and
- Post spill review process and documentation

RESUBMITTED