

Cape Bounty Arctic Watershed Observatory, Melville Island
Spill Contingency Plan

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Plan was prepared: March 24, 2010 and is effective until August 31, 2012

Site: Cape Bounty area (75 deg 55' N, 109 deg 30' W), south central Melville Island

The project will make use of a seasonal field camp near Cape Bounty in the vicinity of a viable air strip and a stream and lake that will be used for a source of drinking water. The following types of fuel will be used on site: gasoline (stored in CSA approved 19L jerry cans and standard 205 L sealed plastic containers (jerry cans)), diesel fuel (stored in standard barrels) and propane (stored in CSA approved 40 lb pressurized cylinders). This document outlines the organization of the response, the plan for initial response, reporting procedures in the event of a spill, and spill kits maintained on site.

Spill Prevention Measures:

- All fuel will be stored > 100 m from a water course in approved containers. All fuel will be stored on an impermeable containment system with capacity to store >400 l (two barrels) leakage.
- Fuel transfer will be via hand pump in the containment area collect spills and spill absorbent will immediately proximate and deployed to absorb any spills.
- All refueling with gasoline will occur > 100 m away from water courses and with a portable tarp and absorbant to collect spills.
- Propane will not spill but care will be taken to avoid the release of gas.
- All empty fuel containers will be removed by aircraft. Remaining fuel will be documented with coordinates and amounts and reported to PCSP Resolute (the provider).
- As this is to be a multiyear project, unused fuel will be used in subsequent years, but all fuel will be removed at the end of the project.
- We will carry spare fuel in approved containers and fill with spouts while en route with snow machines or ATVs. Further, we travel with a spare empty container available to retain fuel from any container that might leak or fail.

Response Organization: The first person on the site will (1) assess the spill situation, (2) immediately contact the designated person in charge (PIC) in camp and provide all information about the spill. Upon receiving this information, the PIC will recommend a course of action according to the following procedure:

- (a) Evaluates the scale of the spill.
- (b) Activates the initial response plan.
- (c) Implements the spill response plan including containment, recovery, remediation, and disposal operations.

(d) Calls NT-NU 24-HOUR SPILL REPORT LINE. TEL: (867) 920-8130. FAX: (867) 873-6924 as soon as possible to report the spill and provide initial incident details. A Spill Report Form will be faxed to (867) 873-6924. A satellite phone is available in camp for immediate use

(e) Gathers relevant information and submits a detailed spill report to the applicable regulatory agencies as soon as possible upon return to Resolute, or no later than thirty (30) days after the initial reporting of the spill.

Initial Response Plan

The first person at the site will ensure safety of himself and those near the site. Next she/he will notify the PIC about the spill.

Gasoline:

If possible and safety permits, stop the flow and eliminate ignition sources. No smoking is permitted when responding to a gasoline spill. Use particulate sorbent material to soak up the spill. All contaminated water, snow/ice, soils, clean up supplies, and absorbent materials will be stored in closed, labeled containers. The containers will be stored in ventilated areas away from incompatible materials.

Diesel :

If possible, and safety permits, stop the flow and extinguish any ignition sources. No smoking is permitted when responding to a diesel spill. Sorbent material will be used to soak up the spill. All contaminated material will be stored in a closed container, labeled and stored in a safe location in the containment area.

Propane:

If possible and safety permits, eliminate all ignition sources. No smoking is permitted when responding to a propane release. Do not attempt to contain or remove release. No disposal is required, as it cannot be contained once it has been released.

Reporting Procedure:

1. Report IMMEDIATELY using the 24 hour Spill Report Line. 24 HOUR SPILL REPORT LINE (867) 920-8130
2. Fill out "SPILL REPORT" form as soon as possible and as completely as possible after making the initial report.
3. Where FAX is available, follow up by sending a copy of the spill Report to FAX # (867) 873-6924
4. If telephone communication is not immediately available, the spill will be communicated to the Base Manager at PCSP via radio.
5. DIAND's Water Resources Inspector ((867)-975-4298) will also be notified as soon as possible.

Spill Kits:

We will have a spill kit at the containment location for immediate use, and travel with spill material with vehicles. Each kit will be inspected by the PIC before heading to camp.

Spill kits will contain :

- disposable 5 mil polyethylene bags.
- 17' x 19' x absorbent sheets
- absorbent socks
- PVC oil resistant gloves
- splash protective goggles.

Person in Charge in camp :

May 25-June 28; Scott Lamoureux, Associate Professor, Department of Geography
Queen's University, 613-533-6033, scott.lamoureux@queensu.ca

June 28-Aug 20 : Johann Wagner, Postdoctoral Researcher, Department of Geography,
Queen's University, 613-533-6030.