

Spill Contingency Plan for: High Arctic permafrost landscape stability and water quality research project, on the Sabine Peninsula

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Plan was prepared: February 23, 2010 and is effective until August 31, 2012

Site: Drake Point area (76 deg 27' N, 108 deg 33' W), northeastern Melville Island

The project will make use of one field camp near Drake Point in the vicinity of a viable air strip and a river that will be used for a source of drinking water. The exact location of the camp will be determined when we arrive in the area and our precise coordinates will be relayed to PCSP base in Resolute. The following types of fuel will be used on site: gasoline (stored in CSA approved 19L jerry cans and standard 205 L sealed fuel drums) and propane (stored in CSA approved 100 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 on an impermeable tarp.
- Fuel transfer will be via hand pump over a similar tarp to collect spills and spill absorbent will be deployed to adsorb any spills.
- All refueling with gasoline will occur > 100 m away from water courses and with a tarp 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 ATVs. Further, we keep 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
- (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. Electrically ground all containers and transporting equipment.

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 in the main lab tent in the field camp, and we will carry portable spill kits on each ATV. 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 :

July 10-July 19 2010 : Melissa Lafreniere (contact information provided above)

July 19-July 31 2010; Scott Lamoureux, Associate Professor, Department of Geography
Queen's University, 613-533-6033, scott.lamoureux@queensu.ca

Attached with this contingency plan :

- A) copy of the Spill Report Form from NT-NU web site;
- B) copies of MSDS for standard gasoline and propane