



Kudlik Construction Ltd.
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SPILL CONTINGENCY PLAN

**Head Office Location
IQALUIT, NUNAVUT**

**Presented to
Community Government Services
Baffin Region, Government of Nunavut**

Review: August 2016

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IQALUIT, NUNAVUT

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1. INTRODUCTION

The following contingency plan presents the prescribed course of action to be followed in case of unanticipated events, such as petroleum products spills. It covers the storage and manipulations of consumables (diesel) at Kudlik's facilities in Igloolik.

2. IGLOOLIK

2.1.Storage

The following consumables are stored on site:

- Arctic Diesel: stored in a 10 000 litres fuel truck

2.2.Response and cleanup equipment

1 complete large emergency spill kits are stored nearby our installations in Igloolik. Each kit contains the following items and are store into four pre-identified 45 gallons steel drums:

- 5 Tyveck coveralls
- 10 pairs of disposable gloves
- 2 x 100 absorbent pad packs
- 1 x 20kg granular absorbent bag
- 4 x 2" diam. Floating absorbent booms
- 10 yellow storage bags
- One shovel

One fuel truck with a capacity of 10,000 litres is present on site. The tank is equipped with an electric pump. It is mainly used to refuel the heavy equipments and vehicles for Kudlik day-to-day activities. The fuel truck is also part of our spill response equipment. In the event of a major spill, the tank can be used to store the liquid pumped from the ground surface. In addition, heavy equipments present on site can also be used to contain de product and to remove the contaminated soils. Finally, the storage bags (super bags) are use to safely store hydrocarbon contaminated soils and have a capacity of one cubic meter. The contaminated soil will then be sent in the landfarm at Nunata Environmental.

3. PROCEDURES IN CASE OF SPILL

3.1. Line of communication

No matter the size of the spill, it must be reported as soon as possible to the site superintendent. The following line of communication must be applied:



3.2. Emergency phone numbers

Kudlik Construction Ltd	Business hours	After hours
Main Office, Iqaluit	(867) 979-1166	
René Déziel, General Manager	(866) 781-0704	(418) 571-8889
Jean-Sébastien Demers, Project Manager	(867) 979-1166	(581) 888-1758
Environment		
Nunavut Spill Report Line	(867) 920-8130	
Nunata Environmental	(867) 979-1488	
RCMP		
Igloolik	(867) 934-0123	

3.3.General procedures

This general procedure is to be followed in the event of a spill. Steps are listed in order of importance; however, depending on the circumstances, conditions, and potential injuries, this order may need to be altered to meet specific needs.

1) Identify the spilled product and call for help:

Petroleum products on site are arctic diesel and gasoline. Advise as soon as possible the site superintendent and call for help when needed.

2) Assessment of dangers and hazards:

Immediate determinations must be made about the direction of the spill's progress, whether downhill, on the ice, towards the water, or already in the water. As well, careful attention will be paid to the full nature of the incident; is this solely a surface contaminant, or are fumes an additional factor; are there any injuries current or possible.

3) Stop the flow at source:

Has the flow been stopped or is it still leaking? Is there an emergency Shut-off valve? Have holes in the container been patched? Is the container empty?
PRECAUTION: ONLY ATTEMPT TO STOP THE FLOW IF IT IS SAFE TO DO SO.

4) Take actions to contain the spill:

Prompt containment can reduce environmental exposure and risk. Containment measures may be land or water based. Land based measures include application of sorbents, construction of berms and diversion/collection trenches. Water based measures could include dams, dykes, and floating booms.

3.4.Specific procedures for different environments

As explained in the following sections, procedures in case of a spill vary depending in which environment it occurs.

3.4.1. Spill on land

- Do not flush into ditches or drainage systems.
- Block entry into waterways and contain with earth, snow or other barrier.
- Remove small spills with sorbent pads.

- On tundra use peat moss and leave in place to degrade, if practical.

3.4.2. Spill on ice and snow

- Block entry into waterways and contain with snow or other barrier.
- Remove minor spills with sorbent pads and/or snow.
- Use ice augers and pump to recover diesel under ice.
- Slots in ice can be cut over slow moving water to contain oil.
- Burn accumulated diesel from the surface using Tiger Torches if feasible and safe to do so.

3.4.3. Spill on Muskeg

- Do not deploy personnel and equipment on marsh or vegetation.
- Remove pooled diesel with pumps and skimmers.
- Flush with low pressure water to herd diesel to collection point.
- Burn only in localized areas, e.g., trenches, piles or windrows.
- Do not burn if root systems can be damaged (low water table).
- Minimize damage caused by equipment and excavation.

3.4.4. Spill in water

- Contain spill as close to release point as possible.
- Use spill containment boom to concentrate slicks for recovery.
- On small spills, use sorbent pads to pick up contained oil.
- On larger spills, use skimmer on contained slicks.
- Do not deploy personnel and equipment onto mudflats or into wetlands

3.4.5. Spill in rivers and streams

- Prevent entry into water, if possible, by building berm or trench.
- Intercept moving slicks in quiet areas using (sorbent) booms.
- Do not use sorbent booms/pads in fast currents and turbulent water.

3.5. Reporting

All spills must be reported to Kudlik management. For every spill, the “NWT Spill Report” form must be filled (see Appendix 1). Pictures must be taken during and after the cleanup progress. The GPS coordinates of the spill location must be recorded. All information and pictures will be used for the spill report. Any spill greater than 100 litres must be reported to the Nunavut 24-hours spill report line (see emergency phone number list). The person reporting the spill shall give as much of the following

information as possible. Please note that the operators at the Hotline are NOT spill management experts. They can only relay information to the appropriate authorities/protection agencies. Reportable information includes but not limited to the following:

- Date and time of spill;
- Direction spill is moving (or if it has stopped);
- Name and phone number of persons close to the location of the spill;
- Type of contaminant spilled and quantity spilled;
- Cause of spill;
- Whether the spill is continuing or has stopped;
- Description of the existing containment;
- Actions taken to recover, clean-up and dispose of spilled contaminant;
- Name, address and phone number of person reporting the spill;
- Name of person in charge of management or control at time of spill.

4. TRAINING

All employees working in Iqaluit, including contractors and sub-contractors will be informed of the spill contingency plan in place. The employees are trained in the safe operation of all machinery and tools, as well as in the handling of materials to help prevent and respond to hazardous material spills in a timely and effective manner.

APPENDIX 1

NWT SPILL REPORT FORM