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Spill Contingency Plan Wales Island Program 2005

Prepared: July 27, 2005

Effective: July 27, 2005 to July 31, 2006

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Project Introduction

The following plan applies to the 2005 Wales Island Exploration Program which involves the establishment of a small, temporary camp designed to accommodate up to 12 people at a time, for an approximate period of six weeks. Camp construction is scheduled to begin between July 28th and August 4th, 2005 with the duration of occupancy expected to be about 6 weeks.

The program planned consists of drilling geophysical targets, ground geophysics on additional geophysical targets and limited till sampling. Drilling will consist of the diamond drilling of 15 short (<100m) holes using a very lightweight, helicopter portable, small diameter (1.5"-2"), drill rig.

Fixed wing support for the camp will be variable and temporary, utilizing a Twin Otter aircraft for the movement of personnel, supplies and equipment. A Hughes 500D helicopter will transport field crews to their work/sampling areas and will remain on site with the personnel for emergency support.

Spill Response Plan

A <u>spill</u> is classified as the discharge of petroleum products or other dangerous substances into the environment. Potential hazards created by the spill for humans, vegetation, water resources, fish and wildlife vary in severity, depending on several factors, including nature of the material, quantity spilled, location and season. The general response to be followed in the event of a spill is:

- Identify the product check container design, warning labels, markings, etc.

 Protect people prevent personnel from approaching the site and keep them at a distance sufficiently removed that they will not be injured by, or cause, a fire or explosion
- Stop the flow at the source reduce or terminate the flow of product without endangering anyone
- Assess the seriousness of the spill evaluate potential dangers of the spill to human health and safety, the aquatic environment, wildlife, ground water, vegetation and other land resources
- Report the spill provide basic information such as location of spill, name of polluter, type and amount of material spilled, date and time of the spill and any perceived threat to human health or the environment (complete NWT Spill Report form)
- Clean up the spill follow procedures appropriate for the location, environment, and material and time of year
- Detailed Report A detailed report of the spill (including GPS location) must be submitted to the DIAND Water Resources Inspector less than 30 days after the spill is reported

Detailed Response Plan

(a) On-site person in charge, management or control of contaminants

John Armstrong: Stornoway Diamond Corporation (camp phone to be determined)

(b) Name and address of employer of personnel described in part (a)

Stornoway Diamond Corporation 860-625 Howe St., Vancouver, B.C.

V6C-2T6

phone: (604) 331-2259 fax: (604) 689-5041

(c) Description of the facility

Facility – 12 Person Camp

<u>Locations</u> –Fuel will be stored in the appropriate facility a safe distance from the accommodations and well away (>100m) from water bodies

<u>Size</u> - Fuel stored at above ground facility in sealed 205 litre (45 gal.) steel drums <u>Storage Capacity</u> – Maximum fuel stored at camp will be 19 drums (3895 litres) of Jet-B and diesel combined, plus two (2) 100lb-propane tanks.

A minor amount of fuel will be stored for no more than four days at the drill site, and removed promptly upon completion of each drill hole. On-site storage will be a safe distance from drilling activities, with fuel stored in sealed steel drums. Maximum fuel storage will be 4 drums (820L) including Jet-B and diesel, plus one (1) 100lb propane tank.

(d) Description of the type and amount of potential contaminants normally stored at camp

JET B fuel for the helicopter – 2050 litres (10 drums)

Propane for heating, etc. - Two (2) 100 lb. tanks

Oil – Several Cases of 4 Cycle Engine Oil

Diesel for the drill - 1845 litres (9 drums)

Description of the type and amount of potential contaminants normally stored at drill site

JET B fuel for the helicopter – 410 litres (2 drums)

Diesel for the drill - 410 litres (2 drums)

Propane for heating, etc. - One (1) 100 lb. tank

(e) Steps to be taken to report, contain, clean up and dispose of a contaminant in the case of a spill

Preventative Measures

Fuel drums will be monitored for any signs of leakage:

- (i) Immediately after they arrive on-site,
- (ii) Once they have been transported to the designated storage area, and
- (iii) Periodically after that time (i.e. as the stocks are accessed).

Drums will be stored upright on flat stable terrain during the summer to reduce chances of a leak. If available a natural depression situated well away from water bodies will be utilized for storage. The contents of any drum that leaks, or shows the potential to leak, will be transferred by wobble pump to a different drum. With the exception of the container in use, all fuel container outlets will be kept sealed to prevent leakage. On-site equipment (e.g. helicopter) will be refueled at some distance from the main storage facilities to reduce potential damage should a fire occur.

Reporting

- (i) Identify the product check container design, warning labels, markings, etc.
- (ii) Protect people prevent personnel from approaching the site and keep them at a distance sufficiently removed that they will not be injured by, or cause, a fire or explosion
- (iii) Stop the flow at the source reduce or terminate the flow of product without endangering anyone
- (iv) Assess the seriousness of the spill evaluate potential dangers of the spill to human health and safety, the aquatic environment, wildlife, ground water, vegetation and other land resources
- (v) Report the spill to the 24-Hour Spill Report Line (867) 920-8130 provide basic information such as location of spill, direction of motion if any, name of contact on-site, type and amount of material spilled, cause of spill, date and time of the spill and any perceived threat to human health or the environment (complete Spill Report form)
- (vi) Report the spill to both Strongbow Exploration Inc's office and Stornoway Diamond Corporation's office (both in Vancouver)
- (vii) Depending on severity of the spill, report to the other appropriate authorities(i.e. Nunavut Water Board, Department of Fisheries and Oceans; Regional Inuit Association)

Containment

Oil spill containment techniques include:

- (i) Earth dams simple and effective control means for surface and small streams
- (ii) Interceptor trenches control on land and shallow subsurface seepage
- (iii) Culvert weirs not applicable
- (iv) Underflow dams effective in narrow ditch or stream
- (v) Net and absorbent barriers effective in tundra area and slow moving water
- (vi) Containment booms commercial product for large bodies of water
- (vii) Space spraying or 'herding' using a very fine water spray as a means of cleaning vegetation, shorelines, lake surface, etc.
- (viii) Absorbent materials include fine sand, soil or snow; commercial sorbents include sheets, rolls, pillows and booms that can be rapidly deployed with no preparation

On-site equipment available for employees includes:

Spill Kit (containing 1 20L Poly containment pail, 12 or more 16" x 20" oil absorbent pads, 2-3" by 48" oil absorbent socks, 1 heavy duty disposal bag (6 mil), 1 pair Chemi-pro gloves and 3 lbs of All Purpose absorbent.), Shovels, and a garden sprayer will be available for spill containment measures.

<u>Clean up</u>

The most likely spill scenario is the partial loss of petroleum products from one of the 205 I (45 gal.) drums. Drums will be checked on arrival in camp, after transfer to the designated storage facility and periodically thereafter. Contents of any leaking drum will be immediately transferred via wobble pump to an empty, leak free drum. It is unlikely that more than one drum will leak at any time. Any spills will be contained, and pumped into empty barrels.

<u>Disposal</u>

No organic soils are present at the proposed storage site, and if possible, any sands and gravels contaminated by a significant spill of petroleum products will be excavated by hand, incinerated to remove hydrocarbons, and returned to their natural site.

<u>Training</u>

All employees and contractors will be oriented upon arrival to the site as to the location and nature of possible spill hazards, as well as the location, content, and usage of spill kits, and locally available materials to control a spill. A brief exercise will be conducted after orientation to clearly outline the spill response protocol, and ensure the employee's comfort with the plan.

Emergency Contact Information

(867) 920-8130
(867) 920-8127
(867) 975-4298
(867) 975-4644
(867) 920-5131
(604) 759-0335
(867)-934-8552
(867) 979-5391
(867) 462-9916
(867) 462-1111

Consultations

- Contingency Planning and Spill Reporting in the NWT A guide to the new regulations, GNWT, 8pp. June, 2002.
- Oil Spill Containment and Clean up Techniques 22 minute instructional video prepared by NWT Renewable Resources Pollution Control Division, 1988.
- Report All Spills Environment Series, GNWT Renewable Resources, Pollution Control Division, 1988.
- Spill Containment and Clean-up Course, GNWT Renewable Resources, Pollution Control Division, 1991, 74pp.
- Spill Contingency Planning and Reporting Regulations Environmental Protection Act Northwest Territories, July 22, 1993, 11pp.

telephone:

facsimile:

(867) 873-7654

(867) 873-0221

Spills, Our Record in the Northwest Territories - Environment Series, GNWT Renewable Resources, Culture and Communications, 1990

Hazardous Substance Specialist Environmental Protection Division Renewable Resources Government of the NWT 600, 5102-50th Ave. Yellowknife NWT

X1A 3S8

Appendix 1 Spill Report Form



NWT SPILL REPORT

(Oil, Gas, Hazardous Chemicals or other Materials)

24 – Hour Report Line Phone: (867) 920-8130 Fax: (867) 873-6924

Α	Report Date and Time	B Date and Time o	of spill (if known)			nal Report ate no	Spill Num	ber
D	Location and map coordinates (if known) and o	direction (if moving)						
Ε	Partly responsible for spill							
F	Product(s) spilled and estimated quantities (product(s) spilled and estimated a	ovide metric volumes/\	weights if possible)					
G	Cause of spill							
Н	Is spill terminated? If spill is continuing, g	give estimated rate	J Is further spillage por	ssible?	K Extent of co	ontaminated area (in	square mete	rs if possible)
L	Factors effecting spill or recovery (weather cor	nditions, terrain, snow	cover, etc.)	M Con	tainment (natural	depression, dikes, et	C.)	
N	Action, if any, taken or proposed to contain, re							
O	Do you require assistance? no yes, describe:	P	ossible hazards to person,	property, o	r environment; eg:	fire, drink water, fish	or wildlife	
Q	Comments or recommendations					FOR SPILL	LINE US	SE ONLY
						Lead agency		
						Spill significance		
						Lead Agency conf	act and time	
						Is this file now clo	sed?	yes no
Repo	orted by P	osition. Employer, Loc	ation			Telephone		
Repo	orted to P	osition. Employer, Loc	eation			Telephone		

Appendix 2

Figure 1: Camp Schematic

2005 Wales Island Camp

The following schematic of the 2005 Wales Island Camp (Figure 1) located at UTM 514312 mE, 7516055 mN (NAD 27 Zone 16) is for illustration purposes only. Please note that <u>it is not</u> drawn to scale.

The camp is comprised of six 14' x 16' wooden framed tents and one outhouse facility, with the perimeter of the area being surrounded by an electrified bear fence. A non-vegetated strip of land lying to the west of the camp perimeter serves as an aircraft landing strip. Water is being sourced from a small lake approximately 200 meters away from the camp facilities.

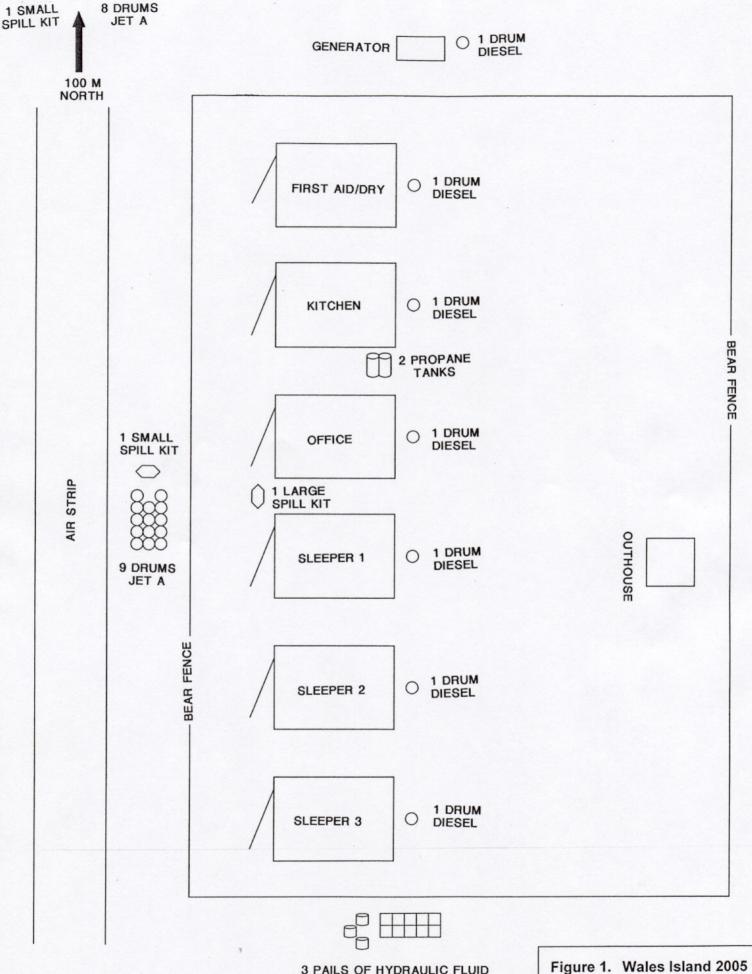
Fuel caches and chemical storage areas are currently located as follows: (Please note that the amounts of the stored materials listed in this summary will fluctuate throughout the duration of the program)

- 9 Drums of Jet A Fuel between the perimeter of the camp and the air strip
- 8 Drums of Jet A Fuel situated 100 meters North of the air strip
- 1 Drum of Diesel located at the back of each tent (total of 6 drums within camp perimeter)
- 1 Drum of Diesel located beside the generator (outside North camp perimeter)
- 2 (100 lb) Propane Tanks located outside of the "Kitchen" tent

Other chemicals located around the site include:

- 3 Pails of Hydraulic Fluid (20 liters each)
- 10 Bags of Salt (40 kg each)

One large spill kit is located within the camp perimeter, directly outside of the "Office" tent, one small spill kit is stored with the 9 drums of Jet A Fuel that are situated between the camp perimeter and the air strip, and a second small spill kit is located with the 8 drums of Jet A Fuel situated approximately 100 meters north of the air strip.



3 PAILS OF HYDRAULIC FLUID 10 BAGS OF SALT

Figure 1. Wales Island 2005 Camp Schematic

(Please note that this illustration is not drawn to scale)