De Beers Canada Inc. – Annual Nunavut Water Board Report for Licence Number 2BE-BAF0611 for Activities during the 2007 Field Season

Executive Summary

In May of 2006 De Beers Canada Inc. – Exploration Division applied for a Licence to take water for the Baffin Island Project.

The purpose of the application was to obtain water for domestic use in camp and for exploration drilling.

A Licence was obtained on July 10, 2006.

On May 4, 2007 an Amendment to the above Licence was received for the purpose of drilling on ice.

There were no unauthorized discharges during the course of the field season.

All drill holes were closed out.

Approximately 800 L/day were used using a submersible pump in the lake adjacent to the camp.

The camp is closed and a photo has been attached of the demobilization.

The location of the water sources was 529778, 7870439 NAD 83 UTM Zone 17N.

The location of the grey water pit is 529864, 7870360 NAD 83 UTM Zone 17N.

A list of locations for water used for drilling is also attached. It estimated that approximately 1250 litres of water per drill hole.

The analytical data required by the above mentioned Amendment is also attached.

ᑕᑲᐊ De Beers Canada Inc. – ᐊᖏᕐᒍᑕᒪᖏᓯᐅᒪᒥᑲ ᓄᓇᕗᒪᒥ ᐃᒪᓕᓚᓂᖓᒍᑦ ᑲᑎᒪᔨᐅᔪᑦ ᑐᕿᖏᑕᐅᑎᑕᖏᑦ ᓕᐃᕿᓯᓯᐅᐸ ᓇᐃᕿᐅᑎᖅᖅᑐᐸ 2BE-BAF0611,ᒥᑲ ᐱᓕᓚᐊᓚᕐᖏᓐᓂᑲ 2007,ᒥ

ᓇᐃᓕᓕᑭᐊᖏᓪᓚᔪᑦ

ᒪᐃ 2006,ᒥ ᑎᐱᐅᖏᓂᑦ, De Beers Canada Inc. – ᖃᓄᖏᑎᓕᓚᓂᖓᒍᑦ ᐱᓕᓚᕆᐊᒍᑦ ᐅᑲᑐᖏᓂᒪᓪᓚᑕ ᓕᐃᕿᓯᓂᖏᓪᓕᐊᓚᖅ ᐃᒥᖏᑕᖅᑕᒪᕐᓂᖓᒍᑦ ᖃᑭᖏᑕᓗᒥ ᐱᓕᓚᐊᖅᔪᔪᒍᑦ.

ᐅᑲᑐᕈᑎᑭᓴ ᐃᒪᖏᑲ ᐊᑐᖅᑕᕈᒪᓕᓗᑎᑲ ᑕᒪᒪᖏᐱᕐᒥᓂ ᐊᒪᒪ ᓂᐅᖏᑐᕈᑎᑲ.

ᓕᐃᕿᓯᓂᓪᓂᑦ ᐊᖅᑭᖏᑕᐅᓕᐅᖏᑐᑦ ᔪᓕᐃ 2006,ᒥ.

ᒪᐃ 4, 2007,ᒥ ᐊᖅᑭᒋᐊᖏᑕᐅᓕᐅᖏᑐᑦ ᓕᐃᕿᓯᓂᖅᑭᑦ ᐱᕐᔪᑎᑭᓕᓗᑎᑦ ᐊᑐᕈᓐᓇᕆᐊᖅᒪᒪᑕ ᓂᐅᖏᑐᖏᓂᓪᓚᑦ ᓯᑯᖅᑯᑦ.

ᐊᖅᑭᖏᑕᐅᓯᒪᖅᑭᑐᓂᖅ ᐱᕐᐃᒍᖅᓇᖅᑭᒪᒪᑕ ᐱᓕᓚᑎᓕᓗᑎᑦ.

ᑕᒪᖏᒥ ᑕᒪᒪᖏᓯᒪᐃᖅ ᐱᓕᓚᐃᖅ ᒪᑐᓯᒪᒪᑕ ᐊᒪᒪ ᐊᕐᕕᖅᓴᐊᖅᑭᑦ ᐃᒍᖏᑎᖏᑕᐅᓯᒪᓕᖏᑐᑦ.

ᐃᒥᖏᑕᖏᐃᐅᔪᖅᓇᖏᑐᖅ ᓇᓗᓇᐃᖅᑯᑕᖅᖅᓴᖅ 529778, 7870439 NAD 83 UTM Zone 17N.

ᓇᓗᓇᐃᖅᑯᑕᖅᓴᒃ ᐃᒥᖏᑕᖏᐃᐅᑦ ᐅᓇ 529864, 7870360 NAD 83 UTM Zone 17N.

ᐊᒪᒪ ᑕᐃᕐᐅᓯᒪᓕᑦ ᐃᒥᖏᑕᖏᐃᐅᑦᑐᑦ ᐃᓕᓯᓕᐅᑎᓯᒪᔪᑦ. 1250 ᓕᑐᖏᕐ ᓴᓂᐊᓂ ᐃᒥᖏᑕᓯᓇᖏᑎᓪᓚᑦ ᓂᐅᖏᑐᖏᓚᒥᑦ ᐊᑕᐅᓯᒥᑦ.

ᖃᐅᔨᐅᓴᖏᑕᐅᓯᒪᓂᕐᑎᒍᑦ ᑲᑎᖏᓯᖏᑕᐅᓯᒪᔪᓂᖅ ᐊᑐᐃᓇᖃᓚᐊᖃᓚᔭᑦ ᐅᖃᐅᓯᓚᕐᐅᓯᒪᔪᓂᖅ ᖏᓂᒪᓕᖅᓯᒪᔪᒍᑦ ᑎᑎᕐᓯᒪᓕᖏᑐᖅᑎᑦ ᑎᑭᐅᓯᖏᒥᑦ.

	Drill Hole	Easting_WGS84_Z17	Northing_WGS84_Z17	Elev. (m)	Dip	EOH (m)
1	BAF0166-07-001C	533006.59 2	7894326.73 4	105.62 1	-90	32.5
2	BAF0266-07-001C	533898.18 5	7896240.23 8	108.79 6	-90	47.0
3	BAF0183-07-001C	529379.15 1	7897389.84 9	103.43 9	-90	11.0
4	BAF0287-07-001C	547135.68 8	7886285.51 4	160.63 4	-90	41.0
5	BAF0252-07-001C	536101.20 5	7867783.44 8	119.97 4	-90	33.5
6	BAF0393-07-001C	527829.75 9	7843469.90 9	63.586	-90	100
7	BAF0391-07-001C	528238.51 1	7843469.51 7	62.062	-90	100
8	BAF0388-07-001C	530871.78 4	7844122.32 1	71.013	-90	96.5
9	BAF0388-07-002C	531002.29 2	7844142.66	69.285	-90	80.0
10	BAF0384-07-001C	531896.74 7	7858908.17 8	91.228	-90	75.5
						558


CAUTION
CAUTION
CAUTION
CAUTION
CAUTION
CAUTION
CAUTION
CAUTION

DE BEERS
CANADA

Nunavut – Baffin
RCD 064 – SPILL CONTINGENCY PLAN

Date prepared: February 13, 2007

This plan is prepared in accordance with De Beers Canada Inc. - Exploration Division ISO 14001 Environmental Management System and the NWT "A Guide to the Spill Contingency Planning and Reporting Regulations January 2002"

The Baffin Island Project is a tent camp for up to 30 people situated near the eastern edge of an un-named lake at latitude 70° 56' 04"N and longitude 80° 11' 03"' W.

Responsible Person: Todd McKinlay, Manager, Early Exploration (24-hour contact)
(416) 645-1710

Head Office Information: De Beers Canada Inc. - Exploration Division
Todd McKinlay, Manager, Early Exploration
65 Overlea Blvd., Suite 300
Toronto, Ontario
M4H 1P1
Phone: (416) 645-1710
Fax: (416) 423-9944
todd.mckinlay@ca.debeersgroup.com

1. Spill Response Equipment

1.1. Responsible Persons will ensure that an appropriate inventory of spill response equipment is kept at each facility.

Small spill kits will contain:
10 pads 16" x 20"
3 SOCS 3" x 4'
2 disposable bags
Nitrile gloves
Large spill kits will contain:
50 pads 16" x 20"
4 SOCs 3" x 12'
8 pillows 18" x 18"
Goggles

Nitrile gloves
5 disposable bags

1.2. All fuel depots will be fully equipped with spill response equipment. The Responsible Person will ensure the equipment inventory is sufficient and is inspected on a regular basis, using the Spill Kit Checklist (CL 032).

1.3. All fuel caches will have secondary containment.

2. Spills Response and Clean-up Procedures

A variety of techniques may be used to respond to and clean-up spills, depending on the type of material spilled and the area in which it is spilled. The following actions are recommended for these specific types of spills as well as referring to the generic procedure above and the Spill Reporting and Response Checklist (CL 008). Reference Material Safety Data Sheets for the material spilled. Material Safety Data Sheets for all site products can be obtained at http:\\eservice.msds.com.

Login

User Name: DeBeers
Password: Toronto

3. Spills Response and Clean-up Procedures – Types of Terrain

3.1. Fuel Spills

3.1.1. Response and Clean-up for **Fuel Spills on Land**

"Land" may be defined as soil, gravel, sand, rock and vegetation. The Responsible Person shall refer to the following instructions, as necessary, for containment and cleanup in the event of a spill on land:

- Obtain absorbent sheeting, "Spagh-zorb" or other ultra-dry absorbent and any other necessary spill containment equipment, pump, hoses, etc.
- If the material is flowing, a berm of peat, native soil or snow is constructed down-slope from the seepage or spill. The tarp is placed in such a way that the fuel can pool for collection and removal (e.g., at the foot of the berm.) If there is a large volume of spilled product, pump the liquid into spare empty

drums for sealing and disposal in accordance with Waste Disposal Procedure (OP 022).

- If the material is on the surface place absorbent sheeting to soak up spilled oil, gasoline, etc.
- Saturated sheeting is disposed of in an empty drum, which is then labelled and sealed. Alternatively, the pads may be wrung out into the empty drum(s); the drums marked and then secured for disposal in accordance with Waste Disposal Procedure (OP 022).

3.1.2. Response and Clean-up for **Fuel Spills on Water**

Prompt responses are required when fuel is spilled on water, to mitigate the spread of the impact. The Responsible Person shall refer, as required, to the following instructions for containment and cleanup in the event of a spill on water:

- If the spill is small, deploy hydrophobic (water-repellent) absorbent pads on water. Hydrophobic pads readily absorb hydrocarbons. Alternatively, an ultra-dry absorbent designed for use on water-based spills may be deployed.
- If the spill is larger, ready several empty drums to act as refuge containers for the spill.
- Deploy containment booms on the water surface to "fence in" the spill area gradually and to prevent it from spreading. Keep in mind those environmental factors such as high winds and wave action can adversely affect attempts at spill cleanup.
- Absorbent booms can then be deployed to encircle and then absorb any hydrocarbon spillage that may have escaped the containment boom.
- Once a boom has been secured, a skimmer may be brought on-scene to aid in capture of the hydrocarbon, or, utilize an absorbent pad; once captured, the product should be pumped to the empty fuel drums and held for disposal in accordance with the Waste Disposal Procedure (OP 022).

3.1.3. Response and Clean-up for **Fuels Spills on Snow**

By its nature, snow is an absorbent, and fuel spilled on snow is collected with relative ease, either by shovel, in the case of small-range spills, and by loader, in the case of more extensive spills.

The Responsible Person shall refer, as required, to the following instructions for containment and cleanup in the event of a spill on snow:

- Assess the nature of the spill. Necessary equipment might include shovels, plastic tarp(s), empty drums, and loader.
- Shovel or scrape contaminated snow and deposit in empty refuge drums. If the spill is more extensive, build peat-bale berms or compacted-snow berms with plastic over top, around the affected area.
- Dispose of contaminated snow and ice as liquid industrial waste, in accordance with the Waste Disposal Procedure (OP 022).

3.1.4. Response and Clean-up for **Fuels Spills on Ice**

Spills on ice are handled in similar fashion as those on snow. However, as ice presents the added danger of immediate access to water, care must be taken to respond quickly to such spills. Should fuel seep or flow through cracks or breaks in the ice, despite all precautions, assistance should be sought immediately.

The Responsible Person shall refer to the following instructions for containment and cleanup in the event of a spill on ice:

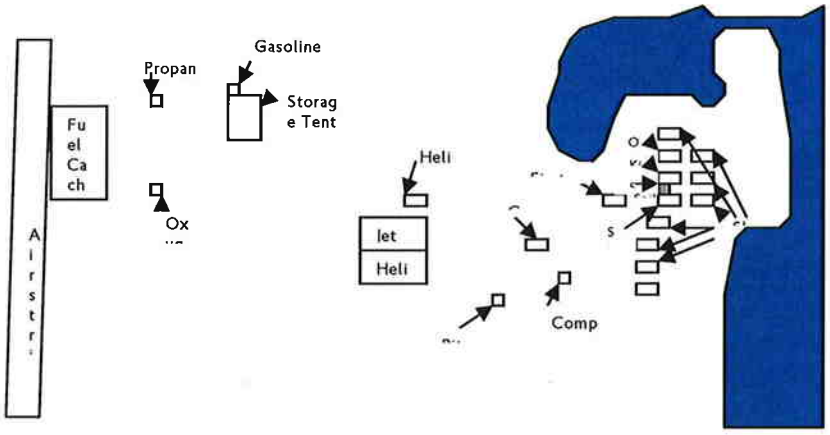
- Construct a compacted-snow berm around the edge of the spill area as fuels will likely sit on the ice surface.
- Although hard ice will retard or prevent fuel entry to the receiving waters below, all contaminated snow and ice, as well as objects embedded in the ice (such as gravel) must be scraped from the ice surface and disposed of in an appropriate manner.

- Dispose of contaminated snow and ice as liquid industrial waste, in accordance with the Waste Disposal Procedure (OP 022).

Nunavut – Baffin

RCD 064 – SPILL CONTINGENCY PLAN

Site Map:



Type and maximum amount of contaminants:

3000 litres of grey water in sump
1 x 2 mitre square of sewage in pit privy
70 drums of gasoline
350 drums of jet fuel
50 drums of diesel fuel
60 30 lb. propane cylinders

Reporting a spill:

1. What to Report – External Reporting to Regulatory Agencies

Spill Reporting Thresholds

Jurisdiction	Compressed Gas	Flammable Liquids	Corrosive Substances	Environmentally Hazardous Substances	Dangerous Wastes	Other Contaminants
Nunavut	***	100 L	5 L/ 5 kg	1 L/ 1 kg	5 L/5 kg	100 L/ 100 kg

All radioactive spills must be immediately reported, however small.

Nunavut – Baffin

RCD 064 – SPILL CONTINGENCY PLAN

*** A spill is "any discharge into the natural environment that is abnormal in quality or quantity in light of all the circumstances of the discharge". ALL spills that are discharged to the environment are to be reported.

- Note that regulatory authorities must be notified **forthwith**, upon discovery of a reportable spill, as required by legislation.

- If the Responsible Person is unsure about the "reportability" of a spill, the Safety, Health and Environmental Management Representative is to be contacted for direction. If you are unable to reach the Environmental Management Representative please err on the side of caution and report the incident.

A sufficiently trained Responsible Person that determines that external reporting is required will provide required information to regulatory authorities. This information may include:

☐ Date and time of spill _____

☐ Location of spill _____

☐ Direction spill is moving_____

☐ Name and phone number of a contact person close to the location of spill

_____

☐ Type of contaminant spilled and quantity spilled

_____

☐ Cause of spill_____

_____

_____

☐ Whether spill is continuing or has stopped _____

☐ Description of existing/planned containment measures

_____

_____

☐ Actions taken to contain, recover, clean up and dispose of spilled contaminant

_____

_____

☐ Name and phone number of person reporting spill

_____

_____

☐ Name of owner or person in charge, management or control of contaminants at time of spill

_____

2. What to Report – Internal Reporting to De Beers Canada Authorities

☐ Report completed through Incident/Accident and Nonconformance reporting system (required as soon as possible, as per DBC System Level Procedure PROC 4.5.2 SYS)

☐ Report to Safety, Health and Environmental Management Representative if MAJOR spill

Canada

NT-NU SPILL REPORT

OIL, GASOLINE, CHEMICALS AND OTHER HAZARDOUS MATERIALS

NT-NU 24-HOUR SPILL REPORT LINE
TEL: (867) 920-8130
FAX: (867) 873-6924
EMAIL: spills@gov.nt.ca

REPORT LINE USE ONLY

A	REPORT DATE: MONTH – DAY – YEAR	REPORT TIME	☐ ORIGINAL SPILL REPORT OR ☐ UPDATE # _____ TO THE ORIGINAL SPILL REPORT	REPORT NUMBER -----
B	OCCURRENCE DATE: MONTH – DAY – YEAR	OCCURRENCE TIME		
C	LAND USE PERMIT NUMBER (IF APPLICABLE)	WATER LICENCE NUMBER (IF APPLICABLE)		
D	GEOGRAPHIC PLACE NAME OR DISTANCE AND DIRECTION FROM NAMED LOCATION	REGION ☐ NWT ☐ NUNAVUT ☐ ADJACENT JURISDICTION OR OCEAN		
E	LATITUDE DEGREES MINUTES SECONDS	LONGITUDE DEGREES MINUTES SECONDS		
F	RESPONSIBLE PARTY OR VESSEL NAME	RESPONSIBLE PARTY ADDRESS OR OFFICE LOCATION		
G	ANY CONTRACTOR INVOLVED	CONTRACTOR ADDRESS OR OFFICE LOCATION		
H	PRODUCT SPILLED	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER	
	SECOND PRODUCT SPILLED (IF APPLICABLE)	QUANTITY IN LITRES, KILOGRAMS OR CUBIC METRES	U.N. NUMBER	
I	SPILL SOURCE	SPILL CAUSE	AREA OF CONTAMINATION IN SQUARE METRES	
J	FACTORS AFFECTING SPILL OR RECOVERY	DESCRIBE ANY ASSISTANCE REQUIRED	HAZARDS TO PERSONS, PROPERTY OR EQUIPMENT	
K	ADDITIONAL INFORMATION, COMMENTS, ACTIONS PROPOSED OR TAKEN TO CONTAIN, RECOVER OR DISPOSE OF SPILLED PRODUCT AND CONTAMINATED MATERIALS			

L	REPORTED TO SPILL LINE BY	POSITION	EMPLOYER	LOCATION CALLING FROM	TELEPHONE
M	ANY ALTERNATE CONTACT	POSITION	EMPLOYER	ALTERNATE CONTACT LOCATION	ALTERNATE TELEPHONE

REPORT LINE USE ONLY

N	RECEIVED AT SPILL LINE BY	POSITION STATION OPERATOR	EMPLOYER	LOCATION CALLED YELLOWKNIFE, NT	REPORT LINE NUMBER (867) 920-8130

LEAD AGENCY ☐ EC ☐ CCG ☐ GNWT ☐ GN ☐ IIA ☐ INAC ☐ NEB ☐ TC | SIGNIFICANCE ☐ MINOR ☐ MAJOR ☐ UNKNOWN | FILE STATUS ☐ OPEN ☐ CLOSED

AGENCY	CONTACT NAME	CONTACT TIME	REMARKS
LEAD AGENCY			
FIRST SUPPORT AGENCY			
SECOND SUPPORT AGENCY			
THIRD SUPPORT AGENCY			

PAGE 1 OF ____

3. Where to report – Regulatory Reporting

Table 4 – Nunavut External Spill Contact Requirements		
Circumstance	**Authorities to Contact**	**Contact #**
During transportation	Local Police	
	GNWT/NU 24 hr Spill Report Line	1-867-920-8130
	Nunavut Emergency Services	1-800-693-1666
	Transportation Company	
	Owner or Consignor of Spilled Material	
	CANUTEC (1-613-996-6666)	(1-613-996-6666)
Released to water	GNWT/NU 24 hr Spill Report Line	1-867-920-8130
All Externally Reportable Spills	GNWT/NU 24 hr Spill Report Line	1-867-920-8130
	Nunavut Emergency Services	1-800-693-1666
Non Emergency Notifications to be Made to:		
DIAND Inspector (Iqaluit)	1-867-975-4285	
For Major Spills or Technical Advice	Environment Canada 24 hr Pager	1-867-766-3737

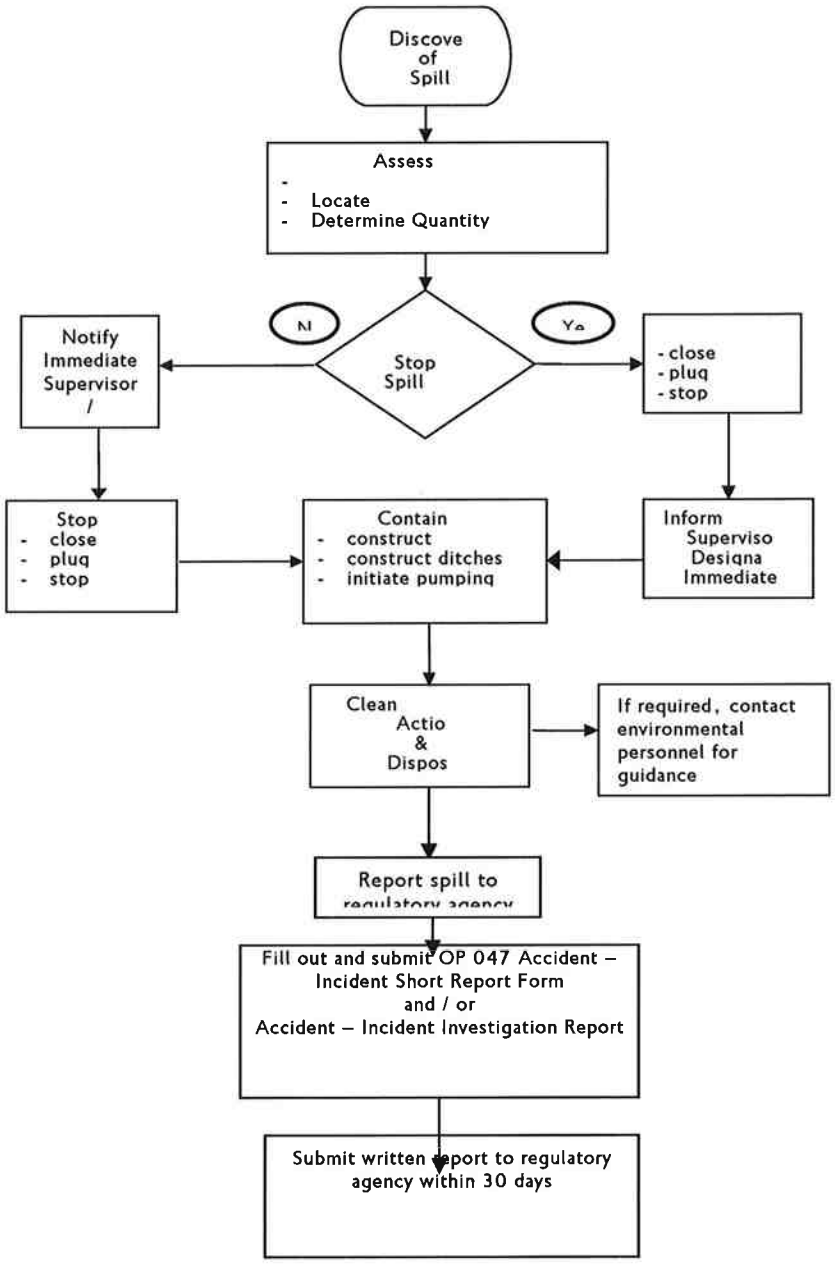
Spill Clean up and Disposal:

All contaminated material will be removed to containers which will be flown for disposal at an approved waste disposal facility.

The NWT Spill Report Form below must be submitted to the FAX number listed on the form.

Nunavut – Baffin
RCD 064 – SPILL CONTINGENCY PLAN

Spill Response Flow Chart



Training:

All personnel at site will be trained in spill response entitled De Beers Canada Inc. - Exploration Division Spill Prevention and Cleanup programme.

This programme includes training in:

- types of substances that make up a spill,
- a definition of a spill,
- preventing a spill,
- clean up of a spill,
- and reporting a spill

Response and clean-up:

Baffin Island project maintains 6 200 litre spill kits and 10 small spill kits.
The location of the spill kits is noted on the Site Map above.
There is also a Honda pump for pumping grey water further away from the lake.