

FERGUSON LAKE CAMP SPILL CONTINGENCY PLAN

July 2012 Project #0577-003

Citation:

Rescan. 2012. Ferguson Lake Camp: Spill Contingency Plan. Prepared for Starfield Resources Inc. by Rescan Environmental Services Ltd.: Vancouver, British Columbia.

Prepared for:



Starfield Resources Inc.

Prepared by:



Rescan™ Environmental Services Ltd. Vancouver, British Columbia

Table of Contents



FERGUSON LAKE CAMP

SPILL CONTINGENCY PLAN

Table of Contents

Table	of Conte	ents	i		
		Figures			
	List of	Tables	ii		
	List of	Appendices	ii		
1.	Introd	uction	1-1		
2.					
۷.		s and Authorizations			
3.	Camp	Facilities			
	3.1	Site Description			
	3.2	Camp Description	3-1		
		3.2.1 Sewage Treatment	3-1		
	3.3	Personnel Training	3-1		
	3.4	Camp Operation Times	3-2		
4.	Fuel a	nd Chemical Product Transport and Storage	4-1		
	4.1	Fuel Transportation			
	4.2	Fuel Storage	4-1		
	4.3 Fuel Types and Quantities				
	4.4	Transport and Storage of Waste	4-2		
5.	Basic S	Steps - Spill Procedure	5-1		
	5.1	Basic Steps - Chain of Command	5-1		
6.	Taking	Action	6-1		
	6.1	Before the Fact: Preventive Measures	6-1		
	6.2	After the Fact: Mitigative Measures	6-1		
	6.3	Fuel Spills on Land	6-2		
		6.3.1 Procedure for Spills on Rock	6-2		
		6.3.2 Procedure for Spills on Land	6-2		
	6.4	Fuel Spills on Water	6-3		
	6.5	Fuel Spills on Snow and Ice	6-3		
		6.5.1 Spills on Snow	6-3		
		6.5.2 Spills on Ice	6-3		
	6.6	Procedure for Chemical Spills	6-5		

SPILL CONTINGENCY PLAN

7.	Genera	al Response and Maintenance Information	.7-1
	7.1	General Equipment and Proximity	.7-1
8.	Respon	ding to Failures and Spills	.8-1
	8.1	Spill Response	.8-1
		<u>List of Figures</u>	
FIGURE	Ē	P.	AGE
Figure	1-1. Fer	rguson Lake 2012 Exploration Program Spatial Extent	.1-2
Figure	7-1a. Co	ontents of Spill Kits - 2007 Drillsite-Campsite - Ferguson Lake	.7-2
Figure	7-1b. C	ontents of Spill Kits - 2012 Drillsite-Campsite - Ferguson Lake	.7-3
		<u>List of Tables</u>	
TABLE		P.	AGE
Table 4	I-1. Qua	antities of Fuel and Oil to be Stored at Site	.4-2
Table 6	5-1. Gui	de to Required Ice Thickness	.6-4
Table 6		quired Ice Thickness for Typical Aircraft Weights AK-68-14-001 Transport Canada rd	.6-4
Table 7	7 -1. Ger	neral Response Inventory - Ferguson Lake Camp	.7-1
		List of Appendices	
Append	lix 1. Nu	unavut Spill Report Form and Guidelines to Completing the Form	
Append	lix 2. Co	ontact List	
Append	lix 3. Ma	aterial Safety Data Sheets (MSDS)	

1. Introduction



1. Introduction

Starfield Resources mineral exploration program on their Ferguson Lake Cu-Ni-Co-PGE Project covers portions of NTS map sheets 65I/13, 14, and 15. This program includes geological mapping and prospecting, and a diamond drilling program. The Starfield property is remote; with no communities immediately nearby.

The program is permitted under Land Use Licenses: KVCL305H27 and Water License NWB2FE20305.

All of the employees from companies working on behalf of Starfield Resources, whether permanent or casual, and program contractors, are required to be trained in Starfield-Major policies and procedures prior to engaging in work at the Ferguson Lake work site.

Starfield Resources corporate office is located in Toronto, Canada:

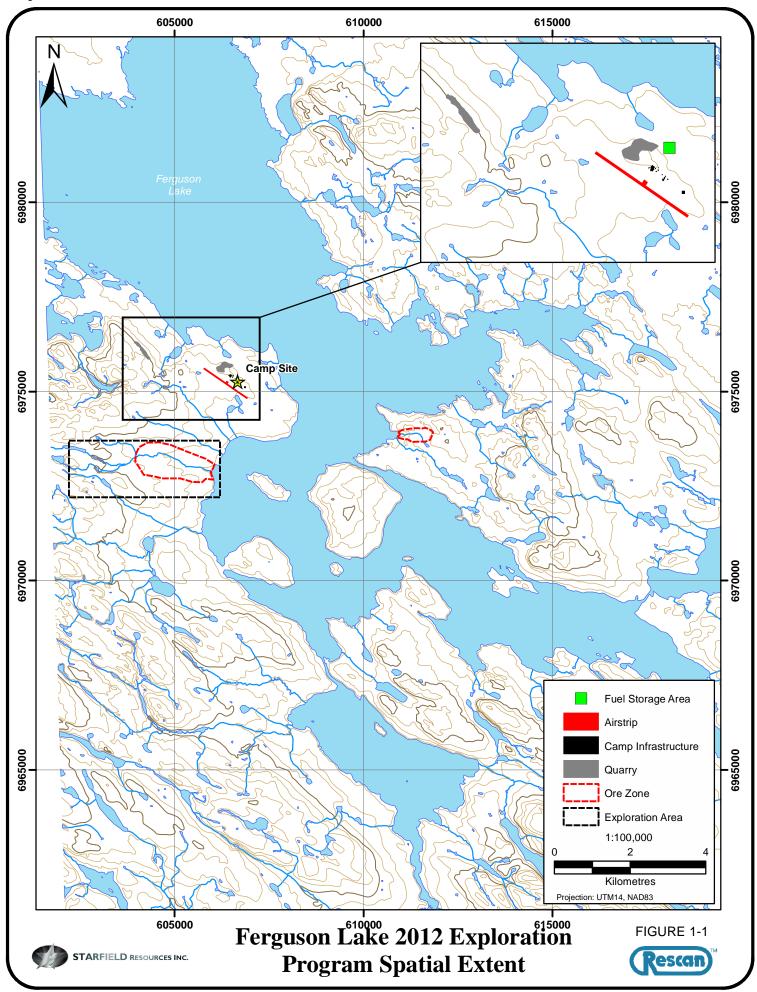
Philip S Martin, President/CEO Suite 2210 - 130 Adelaide Street West, Toronto, Ontario, M5H 3P5 Phone: (416) 860-0400

Starfield Resources is aware that planning for an emergency situation is not an option but an obligatory activity. This Contingency Plan will be posted in the office, living quarters, and Drill Shack(s) and will be distributed to supervisory personnel for distribution to staff and the drilling contractor.

The purpose of this report is to provide a Spill and Contingency Plan for Starfield Resources' present Land Use Licenses, and is required under Part II item C of the Water License.

This Spill and Contingency Plan also provides additional information as requested by the amendment applications for a location change of the airstrip, and bulk fuel storage. Figure 1-1 depicts the location of the new camp and as well as the proposed airstrip and bulk fuel storage.

STARFIELD RESOURCES INC. 1-1



2. Permits and Authorizations



2. Permits and Authorizations

The Ferguson Lake Project, comprised of 30,060.30 acres, is located in Kivalliq Inuit Association (KIA) controlled land in the Kivalliq region of the Nunavut Territory and is governed by the following two KVL Permits and NWB Water License, respectively:

KVCL305H27 Expires July 22, 2017
 NWB2FER0712 Expires July 1, 2012

STARFIELD RESOURCES INC. 2-1

3. Camp Facilities



3. Camp Facilities

3.1 SITE DESCRIPTION

The camp site and core storage area are situated on a low ridge at an elevation between 120 and 130 m on a point on the southwest shore of Ferguson Lake (Figure 1-1). It is a level area of low bedrock outcrops, sand and gravel. The nearest water body is a small pond about 300 m south of the proposed camp site. This pond drains to another pond and eventually south to Ferguson Lake.

The airstrip will be located approximately 200 m SW of the camp, site as chosen in coordination with the Kivalliq Inuit Association (Figure 1-1). Initially the airstrip would be designed to accommodate Twin Otter, Dash 8, and DHC-5 Buffalo sized aircraft, adequate to support the currently planned exploration work. The airstrip will be a 1,380 m x 30 m gravel surface airstrip with an aircraft apron to accommodate maintenance equipment storage, and cargo storage.

3.2 CAMP DESCRIPTION

The camp configuration is a 30-person portable camp with integrated facilities for sleeping, cooking, eating, recreation and washing, as well as structures for water and waste treatment, a core shack, ski-doo shed, wooden shop, office, safety shack, storage sheds, weatherhavens, and pump sheds. All buildings are located within the one hectare square of the camp.

On-site facilities include direct dial satellite phone, high speed internet uplinks, satellite television, full time helicopter and a full time certified First Aid Attendant as required by NWT-NT WCB.

3.2.1 Sewage Treatment

PACTO style toilets accommodate the needs of a 30 person camp.

3.3 PERSONNEL TRAINING

The obligations and responsibilities of the Spill Contingency Plan awareness, maintenance and preparedness begin with the arrival of Starfield and Major Drilling employees and contractors. Particularly in the case of new arrivals; supervisors provide an orientation to acquaint worksite staff with Company policies, procedures, and health and safety issues.

This orientation includes, but is not limited to:

- location of all fuels and fuel products
- location of WHMIS and MSDS sheets (Appendix III)
- o location of spill kits and fuel spill equipment
- instruction of the use of spill kits
- o instruction on the use of spill equipment
- instruction on the clean-up and disposal of fuel products contained in a potential fuel spill.

Staff are required to familiarize themselves with the Spill Contingency Plan and their respective assigned roles. All site personnel are trained in the areas of Environmental awareness, site safety, and basic first-aid CPR. Petroleum handling and spill response personnel are trained in WHMIS and are

STARFIELD RESOURCES INC. 3-1

SPILL CONTINGENCY PLAN

required to have first-aid and CPR. All drill foremen, drill supervisors and project management personnel are required to hold either Supervisor Level I or Level II certificates from WCB as set out under the NWT-NT WCB Mine Health and Safely regulations.

3.4 CAMP OPERATION TIMES

The camp will be in operation from March 15 to December 15 with a maximum of 30 people, and from December 15 to March 15 with caretakers. It will be a permanent camp with the possibility for expansion to support more people if the project goes into production phase.

4. Fuel and Chemical Product Transport and Storage



4. Fuel and Chemical Product Transport and Storage

4.1 FUEL TRANSPORTATION

Transportation of the fuel will be via aircraft as well as overland via the Right of Way on Challengers.

4.2 FUEL STORAGE

A fuel cache/bulk storage will be located approximately 500 m south east of the camp along the ridge that the camp is located on. The fuel will be contained within a bermed area situated on sandy material, providing secondary containment as regulated by Land Use Regulations, the Nunavut Waters Act, and the Terms and Conditions provided in Land Use Licences and Water Licences. The fuel cache/bulk storage is situated south of the camp and is greater than 100 m from the high water mark of any water bodies. Fuel storage will meet the requirements of the CCME guidance document Environment Code of Practice of Aboveground and Underground Storage Tank Systems Containing Petroleum and Allied Petroleum Products.

The Jet-B, P-50, propane and gasoline will all be located within the bermed fuel cache, where as the oils and lubricants will be stored on site in Sea-Cans. The P-50 product will be stored in 50,000 litre fuel bladders, and the gasoline and Jet-B products will be stored in 205 L drums.

All fuel drums are factory sealed, and any drums whose seals have been broken are used for purposes other than for re-fuelling of aircraft. All drums will be inspected daily by Starfield and/or Major personnel for container and bung soundness. All rubber seals prior to re-filling are replaced. Any drum(s) noted to be leaking will immediately have all product transferred to a new drum(s). The drums will be crushed and hauled out at a later date.

To encourage progressive reclamation no more than 20% of the fuel drums will be empty at any one time. Any empties that are deemed not worthy of holding fuel are back hauled to landfill sites by M&T Enterprises and/or flown out in the summer months by plane to Rankin Inlet and/or Baker Lake.

A cache of Jet-B will be stored in an appropriate containment system according to regulations near the helipad for the purposes of Helicopter re-fuelling. All drums are sealed and clearly marked. These drums will be inspected daily by the pilot, who has been trained in company fuel-handling and spills-prevention procedures; a full-size spill kit will be present proximal to the helipad area (Table 4-1).

Spill kits will be available at all fuelling sites.

4.3 FUEL TYPES AND QUANTITIES

The types of fuel and lubricants that will be stored on the camp site will consist of P-50 diesel motive, JET-B, Gasoline, Propane and an assortment of hydraulic oils and motor oils. The P-50 diesel motive will be used for heating purposes and the powering of generators, pumps, and other related heavy equipment. The JET-B will be used for the purposes of helicopter refuelling and also for heating purposes. Gasoline will be used for purposes of re-fuelling ski-doo's. The propane will be used for heating and cooking purposes. Oils and lubricants will be used on the heavy equipment.

STARFIELD RESOURCES INC. 4-1

Table 4-1. Quantities of Fuel and Oil to be Stored at Site

Fuel Type	Container Type	Container Capacity	Total Volume to be Stored On-Site
P-50	Barrels	205L	300,000 L
Gasoline	Barrels	205L	20,500 L
Jet-B	Barrels	205L (sealed)	150,000 L
Propane	Pressured Tanks	100lb Tanks	30,000 lbs
Oils/lubricants	plastic containers	10 L	250L

4.4 TRANSPORT AND STORAGE OF WASTE

In an effort to reduce waste, recycling occurs where possible. The separation of waste products is utilized in order facilitate better incineration. Used oil, waste fuel, absorbent materials, oily or greasy rags, and equipment servicing wastes are incinerated on-site as any storage and/or transportation of these combustible materials is deemed too dangerous by current contract carriers. Notably, used oil and fuel is currently utilized in oil-burning stoves for heating purposes. Used oil and fuel, absorbent materials, oily or greasy rags, and equipment servicing wastes are not discharged into the environment. Starfield will contact the nearest Department of Resources, Wildlife and Economic Development (RWED) as well as the Chief Environmental Protection Officer (EPO) to determine future waste management programs, as per the Used Oil and Waste Fuel Management Regulations.

In the event that removal is deemed necessary, transportation of contaminated goods from Ferguson Lake to Rankin Inlet would be provided by a chartered fixed-wing. Wastes that are transported to Rankin Inlet are in the form of ash, collected and enclosed in sealed barrels, and are disposed of at the Rankin Inlet Landfill. Starfield does not transport hazardous waste off site; although, Starfield is currently applying for a Hazardous Waste Generator number through the DOE in order to obtain a Waste Manifest document. In the event that Starfield has to transport hazardous waste off site, the waste will be transported through either Rankin Inlet, Nunavut or Thompson, Manitoba to an approved facility to receive appropriate treatment.

5. Basic Steps - Spill Procedure



5. Basic Steps - Spill Procedure

Starfield-Major believes that, in the case of a spill or environmental emergency, it is necessary to react in the most immediate, safe and environmentally responsible manner. No spill or incident is so minor that it can be ignored.

Starfield Resources basic steps of a response plan are as follows:

- 1. Ensure the safety of all persons at all times.
- 2. Find and identify the spill substance and its source, and, if possible, stop the process or shut off the source.
- 3. Inform the immediate supervisor or his/her designate at once, so that he/she may take appropriate action. (Appropriate action includes the notification of a government official, if required).
- 4. Contain the spill or environmental hazard, as per its nature, and as per the advice of the Spill Line and Environmental Advisers, as required.
- 5. Implement any necessary cleanup or remedial action.

5.1 BASIC STEPS - CHAIN OF COMMAND

- 1. Immediately notify the Project Manager and/or Project Geologist at Ferguson Lake worksite of any spill. They will then notify the Response coordinator (if a different individual).
- 2. Response coordinator or his/her designate then contacts the 24-Hour Spill Line, if warranted, as follows:

24 HOUR SPILL LINE Phone: (867) 920-8130

Fax: (867) 873-6924

A "Spill Report Form" (Appendix I) is filled out as completely as possible before or after contacting the 24-Hour Spill Line. This form is to be filled out via computer making sure that the information contained within the form is legible to recipients. The instructions for completing the Nunavut Spill Report Form are also attached in Appendix I.

If the spill is minor (such as dripping of fuel during transfer, which can be absorbed by padding, absorbent crystals, *etc.*), then the Project Manager and/or Project Geologist is notified on site.

(For additional contact information, see Appendix II, for a complete contact list).

STARFIELD RESOURCES INC. 5-1

6. Taking Action



6. Taking Action

6.1 BEFORE THE FACT: PREVENTIVE MEASURES

The following actions illustrate the approach of Starfield Resources and Major Drilling to environmental care. In addition, they minimize the potential for spills during fuel handling, transfer or storage:

- 1. Fuel transfer hoses with camlock mechanisms are to be used.
- 2. Carefully monitor fuel content in the receiving vessel during transfer.
- 3. Clean up drips and minor spills immediately.
- 4. Inspect drums, tanks and hoses daily for leaks or potential to leak.
- 5. Plastic Drip pans are to be used at all fuel transfer sites where fuel is transferred.
- 6. Blue absorbent matting is to be used under any stationary machinery (e.g., generator-sets and drill engines)
- 7. Train personnel, especially those who will be operators, in proper fuel-handling and spill response procedures.

6.2 AFTER THE FACT: MITIGATIVE MEASURES

- 1. First steps to take when a spill occurs:
 - a) Ensure your own safety and that of others around you, beginning with those nearest to the scene.
 - b) Control danger to human life, if necessary.
 - c) Identify the source of the spill.
 - d) Notify the Project Manager-Project Geologist, as soon as is practical; he in turn notifies the Response coordinator (if a different individual).
 - e) Assess whether or not the spill readily can be stopped.
 - f) Contain or stop the spill at the source, if possible, by following these actions:
 - i) If filling is in progress, STOP AT ONCE.
 - ii) Close or shut off valves.
 - iii) Place plastic sheeting at the foot of the tank or barrel to prevent seepage into the ground or runoff of fuel.

2. Secondary steps to take:

- a) Determine status of the spill event.
- b) If not reported under 1d), report incident and steps taken to the Project Manager and/or the Project Geologist
- If necessary, pump fuel from a damaged and/or leaking tank or drum into a refuge container.

STARFIELD RESOURCES INC. 6-1

- d) Notify the 24-hour Spill Report Line, and receive further instructions from the appropriate contact agencies listed in Appendix II (e.g., disposal of contaminated soil or ice/snow in sealed containers for removal from site, etc.).
- e) Complete and FAX a copy of the Spill Report
- f) Notify permitting authorities and the Lands Manager.
- g) If possible, resume cleanup and containment.

6.3 FUEL SPILLS ON LAND

"Land" may be defined as soil, gravel, sand, rock and vegetation. Advice on spill containment and cleanup may be obtained from the 24-Hour Spill Line.

6.3.1 Procedure for Spills on Rock

For hydrocarbon spills on rock outcrops, boulder fields, etc.:

- 1. Response coordinator or his/her designate obtains plastic tarp(s) and absorbent sheeting on-site.
- 2. A berm of peat, native soil or snow is constructed down slope of the seepage or spill.
- 3. The tarp is placed in such a way that the fuel can pool for collection and removal (i.e., 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 later off-site.
- 4. Absorbent matting is placed on the rock to soak up spilled oil, petrol, etc.
- 5. Saturated matting is disposed of in an empty drum, which is then labelled and sealed. Alternatively, the matting may be wrung out into the empty drum(s).
- 6. The labeled and sealed drums are backhauled offsite by plane or helicopter to Thompson Manitoba where they are dealt with accordingly.
- 7. Depending on the nature and volume of the spill, the 24-Hour Spill Line may be contacted after Step 4 or after Step 5.

6.3.2 Procedure for Spills on Land

- 1. Response Co-coordinator or his/her designate obtains plastic tarp(s), absorbent matting, and any other necessary spill containment equipment, pump, hoses, etc.
- 2. A berm of peat, native soil or snow is constructed down slope of the seepage or spill.
- 3. 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 drums, and dispose of product by transporting to a solid-waste disposal facility.
- 4. Petroleum-product sheening on vegetation may be controlled by applying a thin dusting of Spagh-Zorb or other ultra-dry absorbent to the groundcover.
- 5. Contact the 24-Hour Spill Line.
- 6. Depending on the nature and volume of the spill, Response Co-coordinator or his/her designate implements the spill action plan.
- 7. Place contaminated soil, etc. in empty drums, seal and ship from site to an approved waste disposal facility. Be sure to prepare a waste manifest to accompany this material when shipping.

6.4 FUEL SPILLS ON WATER

It is important to limit immediately the extent of spills. The following is the procedure to be implemented when an incident occurs:

- 1. If the spill is small, deploy hydrophobic (water repellent) absorbent pads (blue matting) on water. Hydrophobic pads readily absorb hydrocarbons. Alternatively, an ultra-dry absorbent designed for use on water-based spills may be deployed.
- 2. If the spill is larger, prepare several empty drums to act as refuge containers for the spill.
- 3. Deploy containment booms on the water surface to "fence in" the spill area gradually and to prevent it from spreading. Keep in mind that environmental factors such as high winds and wave action can adversely affect attempts at spill cleanup.
- 4. Absorbent booms then can be deployed to encircle and then absorb any hydrocarbon spillage that may have escaped the containment boom.
- 5. Once a boom has been secured, a skimmer may be brought on-scene to aid in capture of the hydrocarbon; once captured, the product should be pumped to the empty fuel drums and held for disposal.
- 6. As soon as possible either during or after the incident, contact the 24-Hour Spill Line. (This will ensure government agencies are informed).
- 7. If the spill is sufficiently large, and cannot be contained by rapid action of personnel present, contact the Mobile Environmental Response Unit (Appendix II) for assistance. (Weather permitting, this unit can be flown to an emergency spill site within several hours.)

6.5 FUEL SPILLS ON SNOW AND ICE

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

6.5.1 Spills on Snow

- 1. Assess the nature of the spill. Necessary equipment might include shovels, plastic tarp(s), and empty drums.
- 2. 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.
- 3. Either during or immediately after the incident, notify the 24-Hour Spill Line.
- 4. Place contaminated snow in drums, seal and transport off-site to approved waste disposal facilities. Be sure to prepare a waste manifest to accompany this material when shipping.

6.5.2 Spills on Ice

Before work or travel can occur on an ice surface, the ice has to be the required thickness according to safety standards (Tables 6-1 and Table 6-2). For any work occurring on the ice; spills are handled in similar fashion as those on snow. However, as ice presents the potential danger of immediate access to water, care must be taken to respond quickly to such spills. Tables 6-1 and 6-2 state the thickness. Should fuel seep or flow through cracks or breaks in the ice, despite all precautions, assistance should be sought immediately.

STARFIELD RESOURCES INC. 6-3

- 1. Construct a compacted-snow berm around the edge of the spill area.
- 2. 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.
- 3. Contact the 24-Hour Spill Line.
- 4. Place contaminated ice in drums, seal and transport off-site to approved waste disposal facilities. Be sure to prepare a waste manifest to accompany this material when shipping.
- 5. Where fuel or oil has escaped to the receiving waters, also contact the 24-hour emergency line of the Mobile Environmental Response Unit (Appendix II).

Table 6-1. Guide to Required Ice Thickness

	Weight	Ice Thickness
Ice Strength for Travel		
	242,500 lb. (121 t)	50 inches (127 cm)
	154,000 lb. (77 t)	40 inches (102 cm)
	100,000 lb. (50 t)	32 inches (81 cm)
	55,000 lb. (28 t)	25 inches (64 cm)
	22,000 lb. (11 t)	15 inches (38 cm)
	17,600 lb. (9 t)	14 inches (36 cm)
	7,700 lb. (4 t)	10 inches (25 cm)
Ice Strength for Stationary Loa	ds	
	242,500 lb. (121 t)	90 inches (229 cm)
	154,000 lb. (77 t)	70 inches (178 cm)
	100,000 lb. (50 t)	60 inches (152 cm)
	55,000 lb. (28 t)	43 inches (109 cm)
	22,000 lb. (11 t)	30 inches (76 cm)
	17,600 lb. (9 t)	24 inches (61 cm)
	7,700 lb. (4 t)	18 inches (46 cm)

Expressed in inches and centimetres

Weights and ice thickness measures rounded to nearest whole

Table 6-2 below presents a numerical summary of the Transport Canada (1974) required fresh water ice thickness versus aircraft load from the AK-68-14-001 standard.

Table 6-2. Required Ice Thickness for Typical Aircraft Weights AK-68-14-001 Transport Canada Standard

Weight - lb/kg	Weight - kN	Required Fresh-Water Ice Thickness (m/in)
10 000/4 545	44.5	0.33/13
30 000/13 640	133.5	0.58/23
67 000/30 400	300.0	0.90/35.5
135 000/61 360	600.0	1.27/50
800 000/364 000	3 570.0	3.20/126

(Source: Winter Operations Report 1995/96, Kennecott/Aber, Lac de Gras, by 669107 Alberta Ltd.)

6.6 PROCEDURE FOR CHEMICAL SPILLS

- 1. Assess the hazard of the spilled material. Members of the camp emergency-response team who might be susceptible in certain situations, (such as asthmatics, where fumes or airborne particles are evident), should be replaced with alternates.
- 2. Assemble the necessary safety equipment before response, (e.g., latex or other protective gloves, goggles or safety glasses, masks or breathers, etc.).
- 3. Apply absorbent matting to soak up liquids.
- 4. Place plastic sheeting over solid chemicals, such as dusts or powders, to prevent their disbursement by wind, or investigation by birds or other mammals.
- 5. Neutralize acids or caustics. Place spilled material and contaminated cleanup supplies in an empty refuge drum and seal for disposal to an approved waste disposal facility. Be sure to prepare a waste manifest to accompany this material when shipping.
- 6. Contact the 24-Hour Spill Line. Receive instructions on disposal methods and designated locations from the appropriate contact agencies listed in Appendix II.

STARFIELD RESOURCES INC. 6-5

7. General Response and Maintenance Information



7. General Response and Maintenance Information

7.1 GENERAL EQUIPMENT AND PROXIMITY

Equipment available to aid in spill response and remediation includes:

- 1. Spill Kits will be placed in appropriate areas around the camp. Figures 7-1a and 7-1b document the contents of the spill kits and Table 7-1 documents the general response inventory that will be available on site.
- 2. A helicopter can be dispatched to a drill site from the camp area within minutes.
- 3. Spill-response equipment is available from Rankin Inlet, 1.5 hours away by air, and or from Thompson, 4 hours away by air. Miscellaneous equipment at the camp area (Table 7-1) will also be made available for spill response and cleanup, including hand tools, shovels (earth and snow), fire extinguishers, fuel transfer pumps, water pumps, miscellaneous hoses and fittings.
- 4. Personnel including first aid attendant and clean up crews are available for immediate dispatch from the Ferguson Lake Lodge camp site.

Table 7-1. General Response Inventory - Ferguson Lake Camp

- Fire extinguishers (valid/recharged) in each structure.
- Water pump and spare, hoses and fittings
- Hammers, assorted sizes
- o Shovels and picks assorted sizes
- o Assorted 10L plastic pails
- o lce auger (gas-powered) c/w extensions
- Plastic garbage bags (boxes of 100 each)
- o Plastic tarps assorted sizes
- o Extra bundles of absorbents
- o Fuel-transfer pumps

STARFIELD RESOURCES INC. 7-1

Figure 7-1a. Contents of Spill Kits - 2007 Drillsite-Campsite - Ferguson Lake

Drill Shack - Spill Kit Drums - 2



M.E.P. ENVIRONMENTAL PRODUCTS LTD.

69 PARAMOUNT ROAD WINNIPEG MANITOBA R2X 2W3 Phone 204-632-4118 Fax 204-633-5809

SK-Majar.Midwest Drilling.wpd

Emergency After Hours call 204-946-2054

MAJOR MIDWEST DRILLING MM-204-50 GAL OIL SELECT SPILL KIT

CONTENTS:

- 1 02U0526, Come in a 55 Gal. Poly DOT, approved open head drum with quick lock ring.
- 2 12WOSB510SN, Hydrocarbon select containment boom 5" x 10' ea .
- 1 WE150SM, Roll hydrocarbon select adsorbant blanket 19" x 144' x 3/8".
- 1 Set of instructions.
- 1 List of Contents.

SPILL INSTRUCTIONS AND PROCEDURES

- EMPTY OUT DRUM.
- ENCIRCLE SPILL AREA WITH BOOM.
- RIP ROLL INTO PIECE SIZE AS NEEDED AND TOSS INTO CENTER OF BOOM TO ADSORB FLUID, RETRIEVE WHEN SATURATED AND PLACE IN DRUM. REPEATIF NECESSARY.
- REMOVE BOOM AND PLACE IN DRUM.
- CONTACT YOUR ENVIRONMENTAL OR SAFETY OFFICER FOR CORRECT DISPOSAL PROCEDURE.

WITHOUT PREJUDICE NO LIABILITY

Figure 7-1b. Contents of Spill Kits - 2012 Drillsite-Campsite - Ferguson Lake

Fuel Storage Area - Transfer Stations - Movable Spill Kits - 6



M.E.P. ENVIRONMENTAL PRODUCTS LTD.

68 PARAMOUNT ROAD WINNIPEG MANITOBA R2X 2W3 Phone 204-632-4118 Fax 204-632-5809

SK-MAjor Midwost.30S.wpd

Emergency After Hours call 204-946-2054

MAJOR DRILLING GROUP 30S OIL SELECT SPILL KIT

- 1 02U0510, 30 GAL POLY DOT APPROVED CONTAINER WITH QUICKLOK RING.
- 1 WB510SN, OIL SELECT WHITE ADSORBANT BOOM 5" X 10".
- 1 SP19, OIL SELECT WHITE SPLIT ROLL 3/8" X 19" X 144'.
- 10 12SWP100H, OIL SELECT ADSORBENT PADS 17" X 19" X 3/8".
- 2 02TB3648L, DISPOSAL BAGS WITH TIES.
- 1 SET OF SPILL PROCEDURES AND INSTRUCTIONS.
- 1 LIST OF CONTENTS.

SPILL PROCEDURE & INSTRUCTIONS

- Encircle spill with adsorbent boom.
- Toss adsorbent pads onto spill.
- Retrieve pads, wring out into disposal bag and re-use if necessary.
- Place contaminated pads in disposal bag when done with them.
- Remove boom from around spill and place in disposal bag.
- Call your environmental officer for disposal instructions.

(WITHOUT PREJUDICE) (NO LIABILITY)

8. Responding to Failures and Spills



8. Responding to Failures and Spills

8.1 SPILL RESPONSE

Following is a list of personnel trained to respond to spill incidents, and their respective responsibilities:

<u>Tyler Power – Project Manager - 2012</u>

Responsibilities

- o Assume authority over the spill scene and personnel involved.
- o Activate the Contingency Plan.
- Report, or direct Response Co-coordinator (if a different individual) to report, the spill to the NWT 24-Hour Spill Report Line (867) 920-8130.

Alternate Project Manager - 2012

Responsibility:

o Perform response duties of Project Manager, in his absence.

Major Drill Foreman - 2012

Responsibilities:

o Drill Foreman may assume authority over the spill scene and personnel involved.

Rescan Environmental Services Ltd. - Environmental Advisors

o RES phone (604) 689-9460 (Vancouver) RES fax (604) 687-4277 (Vancouver)

Contact François Landry

Responsibilities

- o Adviser provides expert advice on environmental/logistical cleanup requirements.
- Each/both may provide assistance in developing any required testing or monitoring program, or
 in activating an existing program. Each/both may recommend preventive measures.

STARFIELD RESOURCES INC. 8-1

Appendix 1

Nunavut Spill Report Form and Guidelines to Completing the Form







Canad'ä

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

Α	REPORT DATE: MONTH – DAY	DRT DATE: MONTH – DAY – YEAR		REPORT	OF			RIGINAL SPILL REPOI	RT,	REPORT NUMBER
В	OCCURRENCE DATE: MONTH	ATE: MONTH – DAY – YEAR						UPDATE # THE ORIGINAL SPILL REPORT		-
С	LAND USE PERMIT NUMBER (IF APPLICABLE)				WATER LICENCE NUMBER (IF			APPLICABLE)		
D	GEOGRAPHIC PLACE NAME (OR DISTANCE AND DIRECTION	ON FROM NAMED LO	OCATION		REGION □ NWT □ NUNAVL	JT	☐ ADJACENT JURIS	DICTION	OR OCEAN
Ε	LATITUDE				LON	IGITUDE				
_	DEGREES	MINUTES	SECONDS			REES		MINUTES	SI	ECONDS
F	RESPONSIBLE PARTY OR VE		RESPONSIBLE F	PARTY AD	JUKE	SS OR OFFICE LOCATI	ION			
G	ANY CONTRACTOR INVOLVED	D	CONTRACTOR A	ADDRESS	SOR	OFFICE LOCATION				
	PRODUCT SPILLED		QUANTITY IN LIT	ΓRES, KIL	LOGR	AMS OR CUBIC METRE	ES	U.N. NUMBER		
Н	SECOND PRODUCT SPILLED	(IF APPLICABLE)	QUANTITY IN LIT	ΓRES, KIL	LOGR	AMS OR CUBIC METRE	ES	U.N. NUMBER		
Ι	SPILL SOURCE		SPILL CAUSE					AREA OF CONTAMIN	ATION IN	SQUARE METRES
J	FACTORS AFFECTING SPILL (OR RECOVERY	DESCRIBE ANY	ASSISTA	NCE	REQUIRED		HAZARDS TO PERSONS, PROPERTY OR ENVIRONMENT		
K										
L	REPORTED TO SPILL LINE BY	POSITION		EMPLOYER LC			LOC	OCATION CALLING FROM		ELEPHONE
M	ANY ALTERNATE CONTACT	POSITION		EMPLOYI	ÆR			TERNATE CONTACT ALTERNATE TELEPHOLOGICATION		
		I	REPORT LINI	E USE OI	NLY					
N I	RECEIVED AT SPILL LINE BY	POSITION		EMPLOYI	′ER		LOC	CATION CALLED	F	REPORT LINE NUMBER
N		STATION OPERATOR					YEL	LOWKNIFE, NT	(867) 920-8130
LEAD	AGENCY DEC DCCG DC	GNWT □GN □ILA □INA	NWT □GN □ILA □INAC □NEB □TC			ANCE IMINOR IMA	JOR	OR □ UNKNOWN FILE STATUS □ OPEN □ CLOSED		
AGEI	NCY	CONTACT NAME		CON	CONTACT TIME			REMARKS		
	AGENCY						+			
	T SUPPORT AGENCY OND SUPPORT AGENCY						\dashv			
							\dashv			
THIRD SUPPORT AGENCY										

FERGUSON LAKE CAMP

Spill Contingency Plan

Appendix 2 Contact List





Appendix 2. Contact List

CONTACT TELEPHONE NUMBERS	
Emergency Spill Hotline	(867)920-8130 (ph) (867)873-6924 (fax)
DIAND Water Resources Inspector (Notify inspector if a spill is reported to the emergency spill hotline)	(867)975-4298 (ph)
Starfield Resources Toronto Office:	(416) 860-0400 (ph)
Major Drilling Winnipeg Office	(204)885-7532 (ph) (204)687-5739 (fax)
Workers Compensation Board	(867)669-4409 (ph) (867)873-0262 (fax)
John Nicholson	(604)786-9095 (ph)
Brian Game	(604)671-2646 (ph)
RCMP (Rankin Inlet)	(867)645-1111 (ph)
Kivalliq Inuit Association (Rankin Inlet)	(867)645-2810 (ph) (867)645-3855 (fax)
INAC Resource Management-Kivalliq	(867)645-2831 (ph)
Ministry of Environment (Rankin Inlet)	(867)645-8083 (ph) (867)645-8085 (fax)
Environment Canada Iqaluit Environment protection 24 hour pager	(867)-975-4464(ph) (867)920-5131(pager)
Department of Fisheries and Oceans	(867)645-2871 (ph)
Nunavut Impact Review Board	(867)983-2593 (ph)
Nunavut Water Board	(867)360-6338 (ph) (867)360-6369 (fax)
Rescan Environmental Services Ltd.	(604)689-9460 (ph) (604)687-4277 (fax)

SPILL CONTINGENCY PLAN

CONTACT LIST - SPILL RESPONSE / ASSISTANCE

Ken Borek Air (Rankin Inlet)	(867)645-2535 (ph)
Missinnippi Air (Thompson)	(204)679-1370 (ph)
M&T Enterprises (Rankin Inlet)	(867)645-2778 (ph) (867)645-2058 (ph)
Baker Lake Contractors (BLCS)	(867)793-2831 (ph) (867)793-2577 (fax)
Quantum Environmental Services	
Mobile Environmental Response Unit	(866)333-6376 (ph)
Northern Air Support Ltd	(888)765-0101(ph)

FERGUSON LAKE CAMP

Spill Contingency Plan

Appendix 3

Material Safety Data Sheets (MSDS)



Appendix 3. Material Safety Data Sheets (MSDS)

MATERIAL SAFETY DATA SHEETS - STARFIELD RESOURCES FERGUSON LAKE CAMP

0	Bounce	0	Lysol Disinfectant Spray
0	Cascade	0	Markel Sharpie
0	Cheer	0	Moth Balls
0	Clorox	0	Propane (odorized)
0	Comet with Bleach	0	Oxygen
0	Comet Cleaner with Clorinoll	0	Spic and Span floor cleaner with bleach
0	Oven Cleaner	0	Spic and Span Glass Cleaner
0	Light Distillate	0	Spic and Span heavy duty degreaser
0	Middle Distillate	0	Spray Paint
0	Gas Unleaded	0	Liquid Tide with Bleach
0	Heating Oil (P-50)	0	Windex Glass Cleaner

MAJOR DRILLING FERGUSON LAKE PROJECT

0	Deep Woods Off	0	Moly Grease	0	Petro Canada Diesel Fuel
0	Dexron	0	Poly Drill 133-x	0	Petro Canada Gas Line
0	Dexron III Mercon	0	Poly Drill 1300		Antifreeze
0	Diesel Fuel - ESSO	0	Calcium Chloride Flake	0	Petro Canada Gasoline
0	EZ-MUD	0	Lafarge FONDU	0	Petro Canada Gear Oil
0	Gasoline	0	Gas Line Antifreeze	0	Petro Canada Hydraulic Oil
0	Hydraul 50	0	Laundry Detergent	0	Petro Canada Jet-B
0	Hydraul 56	0	Poly Drill OBX	0	Petro Canada Oil
	•	O	•	0	Petro Canada Rod Grease
0	Hydrex 100	0	WD-40		
0	Marvel lube WR2	0	Petro Canada Antifreeze	0	Petro Canada Snowmobile Oil
0	Mobil Synthetic	0	Petro Canada Chain Oil	0	Univis N-22
0	Moly 2	0	Petro Canada Dexron III	O	OTHIVIS IN-ZZ