



**SPILL CONTINGENCY PLAN  
EXPLORATION OPERATION  
HIGH LAKE PROPERTY  
NUNAVUT, CANADA**

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Prepared By:

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FIGURE 1 – REGIONAL OVERVIEW MAP

FIGURE 2 – HIGH LAKE CAMP

## 1.0 PREAMBLE

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This Spill Contingency Plan has been compiled with respect to the requirements within the Spill Contingency Planning and Reporting Regulations in Northwest Territories as adopted by the Government of Nunavut.

The High Lake Camp layout is shown on Figure 2.

The following formal distribution has been made of this plan: KIA, NWB, Ian Neill (Exploration Manager, OZ Minerals Canada Resources Inc.), Andrew Mitchell (Manager, Environmental Affairs, OZ Minerals Canada Resources Inc.), Martin Macfarlane (President and Chief Executive Officer – OZ Minerals Canada Resources Inc.).

## 2.0 INTRODUCTION

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This Spill Contingency Plan is to provides a plan of action for reasonably foreseeable spill events at the High Lake camp considering the nature of the fuels and other hazardous materials that will be handled during the Company's operations. The plan defines the responsibilities of key response personnel and outlines the procedures for responding to spill in a way that will act to minimize potential health and safety hazards, environmental damage and remediation costs. The plan has been prepared to provide ready access to all the information needed in dealing with a spill.

The objectives of the Plan are to:

- Define the reporting procedures and communication network to be used in the event of a system failure or material spill.
- Define procedures for the safe and effective containment and cleanup/disposal of a system failure or material spill.
- Define specific individuals and their responsibilities with respect to responding to a spill.

It is OZ Minerals Canada Resources Inc. policy to comply with all existing laws and regulations to help ensure the protection of the environment, to provide such protection of the environment as is technically feasible, to cooperate with other groups working on protection of the environment and to keep employees, government officials and the public informed.

Personnel will be instructed on the plan upon arrival in camp. Instruction will also be given on how to properly manipulate and store fuel and other hazardous substances and on the location of emergency equipment. A more graphical representation of this plan will be posted in common camp areas.

## 2.1. POLICY

### *2.1.1. ENVIRONMENTAL POLICY*

Our aim is to achieve a high standard of care for the natural environment in all of the activities in which we engage.

We undertake to minimize our impact on the environment

We will:

- conduct our operations in compliance with all relevant environmental regulations, licenses and legislation as a minimum condition
- identify, monitor and manage environmental risks arising from our operations
- seek continuous improvement in environmental performance, production processes, waste management and the use of resources
- provide appropriate training and awareness for all employees on environmental issues
- communicate regularly with employees about our aim and about individual responsibilities
- inform our customers and suppliers of our aim and of their responsibilities in relation to our business
- communicate with shareholders, the community and governments about our environmental performance, and contribute to the development of laws and regulations which may affect our business.

### 3.0 SITE DESCRIPTION

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The Camp is located on the southwest shore of High Lake. The site was chosen because it was the location of the original campsite in the 1950's when work on the High Lake deposit was first initiated. Two of the buildings at the camp site date from this period.

The camp consists of 10 wooden buildings, between the dimensions 12'x12' to 16'x32'. These wooden buildings comprise: 2 core shacks, 1 office, 1 foreman's office, 1 sleeper, 1 kitchen, 1 dry, 1 workshop, 1 storage (generator), and 1 recreation area. In addition there are 12 plywood floor canvas walled tents which are used for sleepers, storage, and first aid. See attached map for general camp layout.

Fuel is transported to the site by Buffalo or Hercules ice strip directly onto High Lake. Fuel is then immediately moved by helicopter to one of the three fuel caches. The main fuel cache is located 100m north of the camp site and 150m west of the storage of High Lake. This is the primary cache for the jet fuel and diesel used by the project. A second cache is located 50m southwest of camp and is used primarily for heating fuel during the winter camp operations. A small cache is also established at the west zone drilling site to act as an emergency supply of fuel in case weather does not allow re-supply of drill rigs.

Fuel is stored in 205L drums on racks constructed from drill steel. Drums are elevated off the ground with bungs positioned for easy inspection of leaks. Between all fuel caches after full winter re-supply the total number of drums on site will be 1500 diesel and 750 Jet-B.

Propane is stored in 100lb cylinders at the south end of the camp on separate storage platform. It is supported by a 2"x4" framework to prevent accidental tipping of propane cylinders. Propane is brought to site continually on re-supply flights, with a total number of cylinders stored on site not exceeding 30.

Each of the main buildings will have a drum of fuel supported on wooden crib. A plastic spill container will be placed below each stove and absorbent matting will be zap strapped around each bung/fuel supply assembly.

Other chemicals will be securely stored in the camp area, primarily within the drill foreman's work area.



## 4.0 CONTACTS

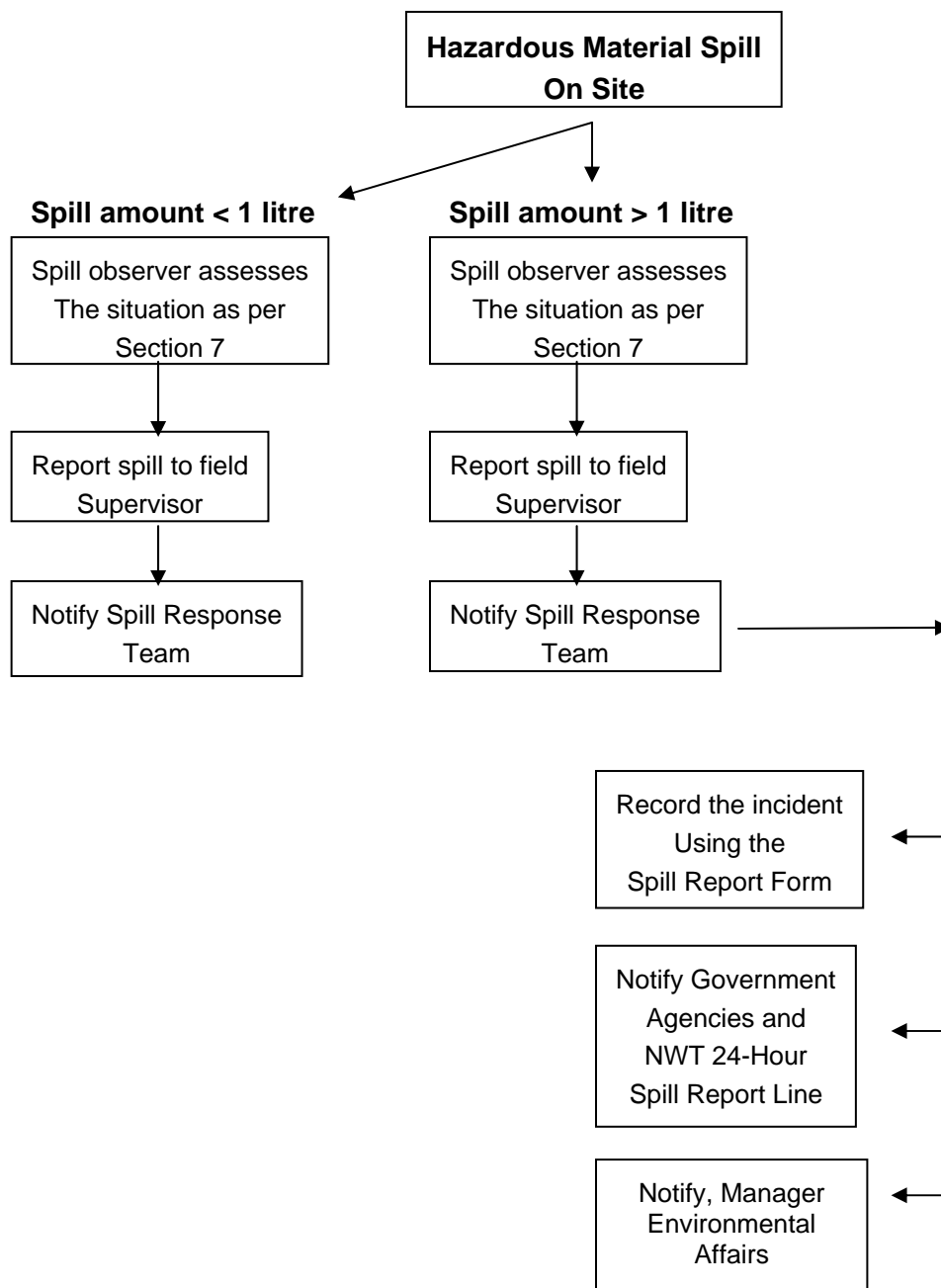
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People and organizations that can be contacted in the event of a spill:

Exploration/Project Manager	Ian Neill/Jason Rickard	403-450-1590
Camp Manager	Tom Collett	403-450-1590
Manager, Environmental Manager	Andrew Mitchell	(807)-346-1668
CEO OZ Minerals Canada Resources Inc	Martin Macfarlane	(807)-346-1668
Kitikmeot Inuit Association	Jack Kaniak	(867)-982-3310
Nunavut Water Board	Phyllis Beaulieu	(867)-360-6338 (867)-360-6369 (fax)
Spill Report Line (24 hr)		(867)-920-8130
Environment Canada		(867)-669-4644
WCB 24 Hour Accidents		(867)-873-7468
WCB Inspector	Peter Bengts	(867)-920-3888
Kugluktuk Health Center	Janet Carstairs	(867)-982-4531
Kugluktuk RCMP	Franco Radescho	(867)-982-1111 (867)-920-8130 (fax)
EC 24 Duty Officer		(867)-766-3737
INAC Manager of Field Operations		(867)-975-4295

## 5.0 RESPONSE ORGANIZATION

The following is a flow chart to illustrate the sequence of events if a hazardous material spill occurs at the Izok, Hood or Gondor Projects.



## 6.0 SPILL RESPONSE TEAM

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All personnel will be informed of the contents of the Spill Contingency Plan and trained in the safe use of relevant spill prevention and clean up equipment. The Field Supervisor will appoint and train two persons to be the Spill Response Team. They will also be responsible to carry out the daily inspections of the fuel storage areas and equipment. Personnel on site will be limited, so for any large spill more people will be brought in to help, from surrounding exploration operations primarily from the IZOK Lake Camp located 75km South of High Lake and secondly from Yellowknife.

### Spill Response Team Responsibilities

- Perform daily inspections at the Camp fuel and chemical storage areas and fuel hoses.
- Report any spill to Exploration Manager or designate.
- Containment of the spill and site remediation.

### Field Supervisor Responsibilities

- Assume complete authority over the spill scene and coordinate all personnel involved.
- Evaluate spill situation and develop overall plan of action.
- Activate the spill contingency plan
- Immediately report the spill to the NWT 24-Hour Spill Report Line and regulatory agencies. (For spill greater than 1 litre)
- Fill out the Spill Report Form (for spill greater than 1 litre)
- Report the spill to the Project Manager. (For spill greater than 1 litre)
- If required, obtain additional manpower, equipment, and material if not available on site for spill response.

### Manager, Environmental Affairs Responsibilities

- Provide regulatory agencies and Zinifex Canada Inc. management with information regarding the status of the clean up activities.
- Prepare and submit a report on the spill incident to regulatory agencies within 30 days of the event.

## 7.0 INITIAL ACTION

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These instructions are to be followed by the first person on the spill scene.

1. Always be alert and consider your safety first.
2. Wear personal protective equipment
3. Do not smoke and eliminate all source of ignition
4. Assess the hazard to people in the vicinity of the spill.
5. If possible control danger to human life
6. Do not touch, smell, taste or get close to unknown substance.
7. If substance has been identified and if possible and safe to do so, try to stop the flow of material.
  - If filling is in progress, stop at once
  - If seeping through a small hole, use a patch kit if practical to do so.
  - If necessary and practical, pump the fuel from the leaking container into a refuge container
8. Immediately report the spill to the Field Supervisor and Spill Response Team by radio, satellite phone or in person.
9. Resume any effective action to contain, mitigate, or terminate the flow of the spilled material.
10. If in doubt about cleaning procedures or for a very large spill, regulatory agencies can help.

## 8.0 REPORTING

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The person who notices the spill must immediately notify the Field Supervisor. As soon as possible the Field Supervisor will report the spill to:

- The 24-Hour Spill Report Line Phone (867) 920-8130, Fax (867) 873-6924
- Fill out the NWT Spill Report Form NWT1752/0202
- Notify the Manager, Environmental Affairs for a spill greater than 1 litre.
- Notify permitting authorities (Nunavut Water Board, Kitikmeot Inuit Association)

## 9.0 RESOURCE INVENTORY

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A spill kit with a capacity of 240 litres will be located at the fuel tank area and will contain:

- 1 – 360 litre/79 gallon polyethylene drum
- 4 – oil absorbent booms (5" X 10')
- 100 – oil absorbent sheets (16.5" X 20" X 3/8")
- 1 – drain cover (36" X 36" X 1/16")
- 1 – Caution tape (3" X 500')
- 1 – 1 lb plugging compound
- 2 – pair Nitrile gloves
- 2 – pair Safety goggles
- 2 – pair Tyvek coveralls
- 1 – instruction booklet
- 10 – printed disposable bags (24" X 48")
- 1- shovel (in remote spill kit only)
- 1- plastic tarp

Shovels, water pump, plastic pails, garbage bags, extra absorbent pad, drip pans will be placed on the side of the wall at the main office and the kitchen. Fire extinguishers are available throughout the camp facility.

Drill Spill Kits with a capacity of 25 L will contain the following:

- 10- Pads (17"x19"x2/8")
- 3 - Socks (3"x4')
- 1 - Pair of Gloves
- 1 - Disposal Bags
- 1 - Warning Sign
- 1 - Literature (Inventory List, MSDS, Instructions)

## 10.0 HAZARDOUS MATERIAL INVENTORY

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This following section lists for each hazardous substance present on the project area, health hazards, spill procedure and disposal procedures. For more detailed information, refer to the MSDS sheets.

### 10.1. DIESEL FUEL, JET-B, GASOLINE

#### ***DIESEL, JET-B AND GASOLINE ARE HIGHLY FLAMMABLE***

##### *10.1.1. GENERAL PRECAUTIONS*

- Do not smoke
- Will be easily ignited by heat, sparks or flames
- Gasoline and Jet-B are more volatile than diesel
- Explosion hazard indoors, in confined spaces and outdoors
- Vapours may form explosive mixtures with air
- Vapours may travel to source of ignition and flash back
- Most vapours are heavier than air. They will spread along ground and collect in low or confined areas.
- Keep pump or electrical equipment far away, be very careful with metallic tools that could sparks on rocks, wait for vapours to dissipate
- Inhalation may cause central nervous effects
- Aspiration into lungs may cause pneumonitis which can be fatal
- Eye and skin irritation
- Prolonged exposure has caused cancers in laboratory animals

##### *10.1.2. SPILL ON LAND*

- Build a containment berm, downslope, using, peat, moss, and soil material, bags filled with sand or rocks and place a plastic tarp at the foot of the berm to pool the spill. Spill can be pumped if in a large amount
- Soak up spilled substance by using absorbent pads
- Excavate the surface soil if necessary. If large excavation is needed, first contact regulatory agencies for approval.
- Remove spill substance splashed on vegetation by applying a thin dusting of Spag-zorb or other ultra-dry absorbent.
- Dispose hydrocarbons, absorbent pad, contaminated soil and cleaning material in an empty drum, seal it and label it.
- On marshy zones, don't destroy vegetal cover, limit personnel and equipment. Remove pooled oil with absorbent pads and/or skimmer.

#### *10.1.3. SPILL ON WATER*

- Contain spill as close to release point as possible
- On small spill, deploy hydrophobic absorbent pads
- On larger spill and weather conditions permitting, use containment boom to limit fuel dispersion. Use a skimmer, pump or hydrophobic absorbent pads to remove fuel inside the boom.
- Dispose hydrocarbons, absorbent pad, contaminated soil and cleaning material in an empty drum, seal it and label it.

#### *10.1.4. SPILL ON RIVERS AND STREAMS*

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

#### *10.1.5. SPILL ON ICE AND SNOW*

- Build a containment berm of compacted snow around spill.
- If hydrocarbons are pooling on ice, pump large amount or use hydrophobic absorbent pads.
- Don't delay removing the spill as hydrocarbons could seep through cracks into the water.
- Scrape ice, shovel all contaminated snow in plastic buckets with lids or in drums. Dispose absorbent pads and other contaminated equipment in separated containers. Label and seal the containers.

#### *10.1.6. SPILL DISPOSAL*

- Contact Federal and Territorial regulatory agencies to identify appropriate disposal methods before disposing of contaminated material.

## 10.2. PROPANE

### **EXTREMELY FLAMMABLE**

#### *10.2.1. GENERAL PRECAUTIONS*

- Do not smoke
- Cylinders may explode when heated
- Cylinders may rocket if ruptured
- Will be easily ignited by heat, sparks or flames
- Explosion hazard indoors, in confined spaces and outdoors
- Vapours may form explosive mixtures with air
- Vapours may travel to source of ignition and flash back



- Vapours from liquefied gas are initially heavier than air and spread along ground.
- Contact with gas or liquefied gas may cause burns, severe injuries and/or frostbite
- Keep pump or electrical equipment far away, be very careful with metallic tools that could sparks on rocks, wait for vapours to dissipate
- Liquid may cause frostbites and blisters
- Blurred vision if goes in the eyes
- Narcotic aphyxiant
- Dizziness, disorientation, excitation, headache, vomiting, unconsciousness if inhaled

#### *10.2.2. SPILL ON LAND, WATER, ICE AND SNOW*

- Eliminate all source of ignition
- Do not attempt to contain the propane release if not absolutely sure on what to do.
- Do not touch or walk through spilled material
- Stop leak if can be done without risk
- If possible, turn container so that gas escapes rather than liquid.
- Water spray can be used to knock down vapours but don't direct water at spill or source of leak
- Prevent spreading of vapours in confined areas
- If or when possible, confine spill with confinement berm. Throw absorbent pads into spill, retrieved them with gaffs or pitchforks.
- Small fire can be extinguished with dry chemical or CO<sub>2</sub>.
- Dispose contaminated materials in a labeled drum.

#### *10.2.3. SPILL DISPOSAL*

- Contact Federal and Territorial regulatory agencies to identify appropriate disposal methods for detective equipment that resulted in the release.

### **10.3. MOTOR OIL, HYDRAULIC OIL, TRANSMISSION FLUID**

#### *10.3.1. GENERAL PRECAUTIONS*

- Avoid breathing mists, may cause lung irritation
- On skin may cause mild irritation

#### *10.3.2. SPILL ACTION*

Soak up with absorbent material

- Disposed contaminated soil and material in sealed and labeled container
- Small amount can be incinerated
- Large amount to be disposed as hazardous waste.

## 10.4. ANTIFREEZE

### 10.4.1. GENERAL PRECAUTIONS

- Respiratory irritation with prolonged exposure.
- Kidney, liver and bladder problems reported in animals

### 10.4.2. SPILL ON LAND

- Soak up by using absorbent pads
- Dispose antifreeze, absorbent pad, contaminated soil and cleaning material in an empty drum, seal it and label it.
- On marshy zones, don't destroy vegetal cover, limit personnel and equipment. If possible remove pooled antifreeze with absorbent pads.

### 10.4.3. SPILL ON RIVERS AND STREAMS

- Prevent entry into water, if possible, by building a berm or trench.

### 10.4.4. SPILL ON ICE AND SNOW

- Build a containment berm of compacted snow around spill.
- If pooling on ice, pump large amount or use absorbent pads.
- Don't delay removing the spill as it can seep through cracks into the water.
- Scrape ice, shovel all contaminated snow into plastic buckets with lids or in drums.
- Dispose absorbent pads and other contaminated equipment in separated containers. Label and seal the containers.

### 10.4.5. SPILL DISPOSAL

- Contact Federal and Territorial regulatory agencies to identify appropriate disposal methods before disposing of contaminated material.

## 10.5. BATTERY ACID

### 10.5.1. GENERAL PRECAUTIONS

- Fire and explosion hazard
- Can be extinguished with dry chemical fire extinguisher.
- Ventilate area
- Remove combustible materials
- Mist inhalation hazard when being charged or spilled
- Acid burns to skin and eyes irritation

### 10.5.2. SPILL ACTION

- Neutralize with soda or lime

- Dispose battery and neutralized contaminated material in a sealed and labeled container
- Dispose as an hazardous waste

## 10.6. POLY-DRILL DR-133

### 10.6.1. GENERAL PRECAUTIONS

- May cause skin and eye irritation

### 10.6.2. SPILL ACTION

- Soak up with absorbent pad
- Dispose residue, contaminated soil and material in labeled containers. Solidify with sand.
- Small amount can be incinerated, otherwise dispose as hazardous waste.

## 10.7. 550-X POLYMER

### 10.7.1. GENERAL PRECAUTIONS

- Prolonged skin contact may cause irritation
- Possible eye irritation
- Ingestion may cause nausea, vomiting, cramps, diarrhea

### 10.7.2. SPILL ACTION

- Clean up spill with gloves. Scrape soil or surface and disposed in labeled containers
- Dispose as hazardous waste

## FIGURES

# MSDS SHEETS

FORMS