



**ALEXCO**

---

**SPILL CONTINGENCY PLAN**

**QML-0009**

**November 2009**

**BELLEKENO PROJECT**

---



**ACCESS**  
CONSULTING GROUP

**Table of Contents**

<b>1.0</b>	<b>INTRODUCTION.....</b>	<b>1</b>
<b>2.0</b>	<b>DEFINITIONS .....</b>	<b>1</b>
<b>4.0</b>	<b>FOLLOW UP TO SERIOUS INCIDENT - KENO HILL PROJECT .....</b>	<b>3</b>
<b>5.0</b>	<b>SERIOUS INCIDENT RESPONSIBILITY MATRIX.....</b>	<b>4</b>
<b>6.0</b>	<b>REPORTABLE SPILL QUANTITIES.....</b>	<b>5</b>
<b>7.0</b>	<b>SPILL RESPONSE EQUIPMENT RESOURCE LIST .....</b>	<b>7</b>
<b>8.0</b>	<b>EMERGENCY EQUIPMENT AND EQUIPMENT LOCATIONS.....</b>	<b>7</b>
<b>9.0</b>	<b>MSDS INFORMATION AND PERSONNEL TRAINING .....</b>	<b>9</b>

## 1.0 INTRODUCTION

This guide sets out the response protocol in the event of a spill for all hazardous substances used throughout the course of the Bellekeno mine development and operations. Additional information pertaining to hazardous materials can be found in the **Hazardous Materials Management Plan**. Additional information pertaining more broadly to emergencies and incidents of all kinds are laid out in the **Emergency Response Plan**.

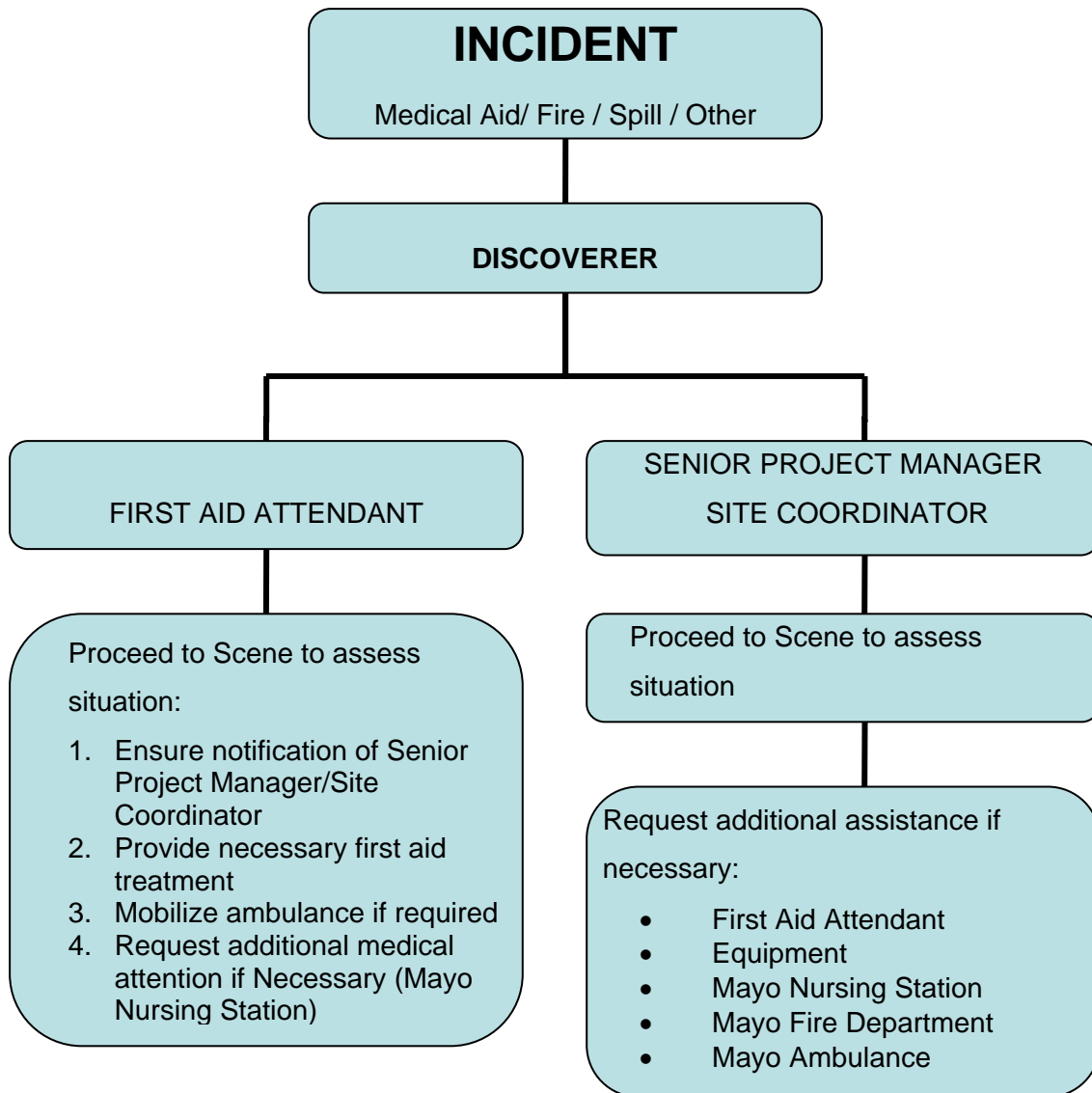
## 2.0 DEFINITIONS

A “**Serious Incident**” is defined as any occurrence meeting one or more of the following criteria:

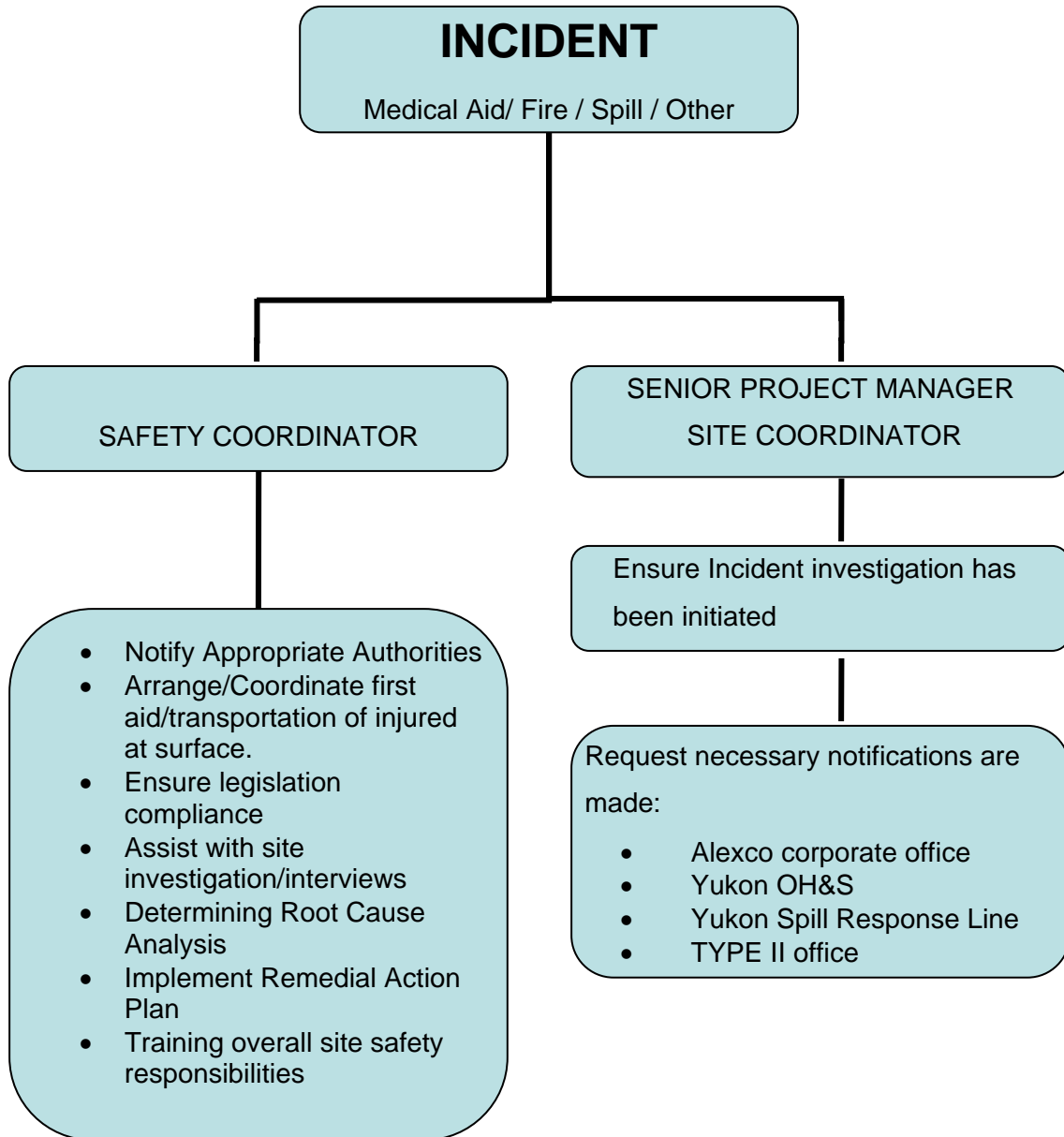
1. Any “serious injury” or “serious accident” as defined in OH&S 33(1) (see Section 2.2),
2. Any incident requiring first aid or rescue response to the scene,
3. Any fire requiring discharge of a fire extinguisher,
4. **Any release of mill process solution outside of containment,**
5. **Any release of a hazardous product where there is potential for that product to enter a waterway,**
6. **Any hazardous product spill of reportable volume, as defined in Section 6.0.**

Thus, as per OH&S 33(1) Section 2.2, spills as described above are to be treated as “**serious incidents**” and will be followed up as per the protocol as described below:

### 3.0 INITIAL RESPONSE TO SERIOUS INCIDENT - KENO HILL PROJECT



#### 4.0 FOLLOW UP TO SERIOUS INCIDENT - KENO HILL PROJECT



## 5.0 SERIOUS INCIDENT RESPONSIBILITY MATRIX

POSITION	RESPONSIBILITIES
<b>Area Supervisor Site Coordinator</b>	<ul style="list-style-type: none"> <li>• Coordinate initial response</li> <li>• E.R.T. and specialized resources mobilization &amp; consultation</li> <li>• Attend and coordinate response for all incidents involving “serious injury” and “serious accident”, as defined in Sec. 33, OHS Act</li> <li>• Initial scene control</li> <li>• Responsible for investigation – determine contributing causes and take immediate proactive action</li> <li>• Request additional external resources as necessary</li> <li>• Coordinate recovery and investigative activity</li> <li>• Notify Senior Project Manager</li> <li>• Ensure all government reporting has been completed</li> <li>• Organize and conduct post-incident debriefings</li> <li>• Prepare Incident Report and make recommendations</li> </ul>
<b>First Aid Attendant</b>	<ul style="list-style-type: none"> <li>• Ensure area supervisor has been notified of incident</li> <li>• Provide first aid treatment if necessary</li> <li>• Mobilize ambulance to scene, if required</li> <li>• Stand by to assist as required by scene coordinator</li> </ul>
<b>Senior Project Manager</b>	<ul style="list-style-type: none"> <li>• Designate on-call senior personnel during weekends</li> <li>• Receive briefings on incident details</li> <li>• Provide direction as required</li> <li>• Notify regulatory agencies, government and Alexco corporate office of incident</li> <li>• Review Incident Reports</li> <li>• Attend at all incidents involving “serious injury” and “serious accident”, as defined in Sec. 33, OHS Act</li> <li>• Verify compliance with standards and government regulatory requirements</li> <li>• Forward necessary reports to regulatory agencies</li> <li>• Fire Chief – assume responsibility for fire investigation</li> </ul>
<b>Safety Coordinator</b>	

## 6.0 REPORTABLE SPILL QUANTITIES

Should a spill of reportable quantity occur, under federal and territorial regulations, we are required to *immediately* notify the 24-hour Yukon Spill Report line: telephone number 867-667-7244.

For the purposes of the water use license:

1. Any quantity of spill is reportable.
2. The Senior Project Manager, Site Coordinator or Manager On-Call are responsible for reporting spills.
3. Reportable spills require an Incident Investigation Report to be completed.

This guide will assist in determining what volume of product requires reporting to regulatory agencies.

If a spill is deemed to be of reportable quantity, the area supervisor will immediately notify the Site Coordinator or Senior Project Manager who will in turn ensure that spill reporting is completed by designated personnel.

**Reportable spill quantities**

HAZARD Class	TYPICAL PRODUCTS ON SITE	REPORTABLE QUANTITY
Explosives (1)	<ul style="list-style-type: none"> <li>• ANFO</li> </ul>	Any amount spilled outside of blast pattern
Flammable Gases (2.1)	<ul style="list-style-type: none"> <li>• Propane</li> <li>• Acetylene</li> </ul>	>100 Liters
Non-Flammable Gases (2.2)	<ul style="list-style-type: none"> <li>• Halon</li> </ul>	>100 Liters
Poisonous Gases (2.3)		Any Amount
Non-poisonous Gases (2.3)		>100 Liters
Corrosive Gases (2.4)		Any Amount
Non-corrosive Gases (2.2)		>100 Liters
Flammable Liquids (3.)	<ul style="list-style-type: none"> <li>• Diesel</li> <li>• Gasoline</li> <li>• Glycol</li> <li>• Hydraulic &amp;/or Engine Oil</li> </ul>	>200 Liters
Flammable Solids (4.)		>25 kg
Spontaneous Combustibles (4.)		>25 kg
Dangerous When Wet (4.)		>25 kg
Oxidizers (5.1)	<ul style="list-style-type: none"> <li>• Sodium Hydroxide / Caustic Soda</li> <li>• Lime Solution</li> <li>• Sodium Nitrate</li> <li>• Calcium Hypochlorite</li> <li>• Ammonium Nitrate</li> </ul>	>50 kg or 50 Liters
Corrosive Materials (8.)	<ul style="list-style-type: none"> <li>• Hydrochloric / Muriatic /</li> </ul>	>5 kg or 5 Liters
Miscellaneous Dangerous Goods (9.1)		>50 kg
Dangerous Waste (9.3)	<ul style="list-style-type: none"> <li>• Waste Oil</li> </ul>	>5 kg or 5 Liters

MLU LQ00240 operating permit dictates that all spills will be reported.

## 7.0 SPILL RESPONSE EQUIPMENT RESOURCE LIST

	Location	Contact
<b>Spill Response Kit</b>	<ul style="list-style-type: none"> <li>• Bellekeno East Fuel Tank</li> <li>• Bellekeno East Shop</li> <li>• Bellekeno 625 Adit</li> <li>• Flame and Moth Mill</li> <li>• All Vehicles Carrying Hazardous Materials</li> </ul>	Site Coordinator
<b>Oil- Absorbent Pads</b>	<ul style="list-style-type: none"> <li>• In Spill Kits</li> </ul>	Site Coordinator
<b>Oil- Absorbent Booms</b>	<ul style="list-style-type: none"> <li>• In Spill Kits</li> </ul>	Site Coordinator

Any contaminated soils will be removed to the land treatment facility in Mayo or a suitable permitted facility within the Keno Project area.

All vehicles carrying hazardous materials will be equipped with a spill kit and personnel will be trained in spill response measures.

## 8.0 EMERGENCY EQUIPMENT AND EQUIPMENT LOCATIONS

EMERGENCY EQUIPMENT	LOCATION	USE IS AUTHORIZED BY:
<b>Ambulance</b> 4x4 Suburban with Stretchers	Elsa Town site Fire hall	Sr .Project Manager / Site Coord.  First Aid Attendant
<b>(MMTU)</b> <b>Mobile Medical Treatment Unit</b>	Bellekeno Mine Site	Sr .Project Manager / Site Coord.

ALEXCO KENO HILL MINING CORP. BELLEKENO PROJECT  
 SPILL CONTINGENCY PLAN –QML-0009

4 x 4 Truck with Stretchers		First Aid Attendant
<b>AED</b> Automatic External Defibrillator Use when CPR is required	Admin 1 <sup>st</sup> Aid Room Black and Neon ZOLL – AED Bellekeno East 1 <sup>st</sup> Aid Room	Sr .Project Manager / Site Coord.  First Aid Attendant
<b>Oxygen</b> <b>Airway Adjuncts (OPA)</b>	MMTV 1 <sup>st</sup> Aid Jump Kit Admin 1 <sup>st</sup> Aid Room Bellekeno East 1 <sup>st</sup> Aid Room	Sr .Project Manager / Site Coord.  First Aid Attendant
<b>Spinal Precautions</b> Spine Boards & Head Blocks Stiff Collars Spyder Straps KED – Vehicle extrication device	Ambulance MMTV Admin 1 <sup>st</sup> Aid Room Bellekeno East 1 <sup>st</sup> Aid Room	Sr .Project Manager / Site Coord.  First Aid Attendant
<b>Splints</b> Vacuum Splints – Extremity breaks	Admin 1 <sup>st</sup> Aid Room Bellekeno E. 1 <sup>st</sup> Aid Room	Sr .Project Manager / Site Coord.  First Aid Attendant
<b>Wound Management</b> <b>Burn Dressings</b> Sterile Water Bandages & Dressings	Ambulance MMTV Admin 1 <sup>st</sup> Aid Room 1 <sup>st</sup> Aid Jump Kit Bellekeno East 1 <sup>st</sup> Aid Room	Sr .Project Manager / Site Coord.  First Aid Attendant
<b>EPI Pens</b> Anaphylactic Shock / Allergies	Ambulance MMTV Admin 1 <sup>st</sup> Aid Room 1 <sup>st</sup> Aid Jump Kit Bellekeno E. 1 <sup>st</sup> Aid Room	Sr .Project Manager / Site Coord.  First Aid Attendant

## 9.0 MSDS INFORMATION AND PERSONNEL TRAINING

<p>Hazardous Materials Storage</p>	<ul style="list-style-type: none"> <li>• All hazardous materials will be stored safely and appropriately</li> <li>• All hazardous materials will be segregated and stored to ensure integrity of product containers, avoidance of accidental mixing, and safety from weather effects</li> <li>• Hazardous materials will be stored in locations with secondary containment measures in place in order to limit potential for spills</li> <li>• A complete listing of MSDS sheets for all hazardous materials and spill response strategy protocol will be made available to all employees and will be located at the following locations:                         <ul style="list-style-type: none"> <li>○ Administration Office</li> <li>○ Bellekeno East Shifters Office</li> <li>○ Care &amp; Maintenance Shop</li> <li>○ First Aid Room</li> <li>○ General Managers Workspace</li> <li>○ Kitchen Medical Station</li> <li>○ Mine Rescue Shed – Bellekeno East</li> <li>○ Safety Coordinators Office</li> <li>○ Flame and Moth Mill – Reagent Storage Facility</li> <li>○ Bellekeno Mine Explosives Magazine</li> </ul> </li> </ul>
<p>Employee Training</p>	<ul style="list-style-type: none"> <li>• All employees involved with handling hazardous materials will receive training in safe and appropriate use as per Workplace Hazardous Materials Information Systems Regulations (WHMIS) of the Occupational Health and Safety Act.</li> <li>• All employees will follow OH&amp;S and regulations and use appropriate Personal Protective Equipment (PPE) and handling procedures when using hazardous materials</li> </ul>
<p>Spills and Emergencies</p>	<ul style="list-style-type: none"> <li>• All spills will be dealt with as per measures described in the Emergency Response Plan</li> <li>• Should a spill of reportable quantity occur, the 24 hour Yukon Spill Report line (867-667-7244) will be immediately notified</li> </ul>

Signage and Monitoring	<ul style="list-style-type: none"><li>• All areas which will be used to store hazardous materials will be clearly indicated with appropriate signage</li><li>• Monitoring of areas which will be used to store hazardous materials will be monitored on a regular basis in order to ensure measures set out in this plan are complied with</li></ul>
------------------------	--