Hazardous Waste Contingency Plan

EPA Identification Number COD041517343

HENDERSON MINE

February 2014

Climax Molybdenum
A Freeport-McMoRan Company

Prepared by:

Aquionix

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FACILITY INFORMATION

MINE FACILITY	
Facility Name	Henderson Mine
Facility Owner	Climax Molybdenum Company
Facility Type	Underground Molybdenum Mining and Associated Operations
Physical Address	1746 County Road 202, Empire, Colorado 80438
Mailing Address	1746 County Road 202, Empire, Colorado 80438
Phone Number	720-942-3394
Fax Number	303-569-2829
Facility Contact	Miguel Hamarat, Environmental Manager (720) 942-3255

TABLE OF CONTENTS

LIST OF APPENDICES

DISTRIBUTION LIST

Upon becoming a large quantity generator of hazardous waste, a copy of this Contingency Plan will be forwarded to the following Agencies.

Copy #	Copy Holder
1	Clear Creek County Fire Authority
2	Clear Creek County LEPC
3	Clear Creek County Sheriff's Office

REVISION HISTORY

Revision Date	Description of Changes
May 2011	Initial Release
May 2013	Annual Update
February 2014	Annual Review and Update Phone Numbers
August 2015	Contact Updates Only

EXECUTIVE SUMMARY

Purpose

The Henderson Mine has the potential to become an episodic Large Quantity Generator (LQG) of hazardous waste. In the event that this occurs, this plan will be implemented and included with the facility's Incident Response Manual (IRM). In combination, these documents will be the primary emergency response documents used by the facility in the event of a fire, explosion, or release of hazardous waste or hazardous waste constituents which could threaten human health or the environment.

Although this facility is designed, constructed, maintained, and operated in a manner that minimizes the possibility for emergency incidents such as fire, explosions and any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil, or surface water, this Contingency Plan and the facility's IRM have been developed to describe actions that will be performed at the Henderson Mine to minimize the hazards to human health and the environment in the unlikely event of such incidents.

Regulatory References

This Contingency Plan has been developed in general accordance with 6 Code of Colorado Regulations (CCR) 1007-3:

- 262.34(a)(4) – Large Quantity Generator Requirements
- 265 Subpart C – Preparedness and Prevention
- 265 Subpart D – Contingency Plan and Emergency Procedures

Review and Revision:

During periods when the facility is a large quantity generator of hazardous waste, this Contingency Plan will be reviewed and amended, if necessary, when:

- Applicable regulations are revised;
- The plan fails in an emergency;
- There are significant changes in the facility, in its design, construction, operation, maintenance or other circumstances that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous waste constituents or changes the response necessary in an emergency;
- The list of ERCs changes;
- The list of emergency equipment changes; and/or
- Drills, exercises, or inspections (internal or external) indicate that a change is needed.

Related Plans and Procedures:

This contingency plan has been developed in association with the following plans and procedures:

Title	Purpose
Henderson Mine IRM	This is the facility's primary source of response procedures that are to be used in the event of an environmental incident.
Henderson Mine Emergency Notification and Emergency Procedures Manual	Outlines emergency notification and emergency procedures for Mine emergency response activities.
Hazardous Waste Management Plan	Describes procedures and regulatory requirements for pre-transport handling, labeling, and management of hazardous waste generated on-site.
SPCC/MCP Plan	Spill control, containment and countermeasures plan includes the engineering and administrative controls in place to prevent the discharge of oil or hazardous chemicals to navigable waters.
Stormwater Management Plan	Outlines the facilities drainage patterns and practices for preventing storm water contamination.

1.0 DESCRIPTION OF FACILITIES

Henderson Mine is located on the north side of Red Mountain near the confluence of Butler Gulch and the West Fork of Clear Creek. It is nine miles west of Empire, Colorado, in Clear Creek County on the eastern slope of the Continental Divide. The 1.5 mile access road to the mine site leaves U. S. Highway 40 at the small village of Berthoud Falls, Colorado. The elevation at the mine site is 10,400 feet. Expressed as longitude and latitude the Henderson Mine location is: 39º 45' north latitude and 105º 52' west longitude.

Access to the mine is gained by a 28 foot diameter vertical shaft which is 3,100 feet deep. Four other shafts service the ventilation requirements for intake and discharge air. Horizontal drifts (tunnels) at the bottom of the shafts provide access to the ore body. A highly mechanized panel-cave system of mining is being employed with a nominal capacity of 40,000 tons per day. Diesel powered rubber-tired equipment is used in the mining process.

A conveyor belt system is used to haul the mined ore to the Henderson Mill. The conveyor system begins as a tunnel below the ore body at an elevation of 7,000 feet (5,300 feet below the summit of Red Mountain). The tunnel runs west for 9.6 miles, surfacing at an elevation of 9,000 feet near the confluence of the Williams Fork River and Darling Creek on the western slope of the Continental Divide.

2.0 DESCRIPTION OF HAZARDOUS WASTE

2.1 Routinely Generated Hazardous Wastes

Henderson has the potential to routinely generate the following types of hazardous waste:

- Spent solvents;
- Waste paints;
- Broken light bulbs; and
- Broken lead acid batteries.

These hazardous wastes are typically generated in the Mine and outlying shops and are stored in satellite accumulation containers (see Satellite and Central Accumulation Area List in Appendix C). From satellite accumulation areas, waste materials are transported to the central accumulation area prior to being shipped off-site.

These hazardous wastes have been characterized and are shipped off-site via DOT and EPA approved transportation companies, and disposed, recycled or reclaimed at properly permitted facilities.

Currently there are no Satellite Accumulation Areas (SAA) at the Mine site. In the event a project produces hazardous waste material a temporary SAA will set-up and utilized.

2.2 Non-Routinely Generated Hazardous Wastes

Hazardous waste may also periodically be generated from sources such as:

- Broken mercury containing devices;
- Outdated chemicals; and
- Spill cleanup debris and materials.

Upon generation, these wastes will be characterized and managed according to the procedures discussed in the Henderson Waste Management Plan. Non-routine wastes are typically transported directly to the central accumulation area for accumulation prior to transportation off-site.

3.0 EMERGENCY RESPONSE ORGANIZATION AND RESPONSIBILITES

Emergency response organization and responsibilities are detailed in Section 3.0 of the facility's IRM.

4.0 COORDINATION WITH EXTERNAL RESPONSE ORGANIZATIONS

To ensure a rapid and efficient response, Henderson has contacted the following emergency organizations that may have a role in responding to emergencies at the facilities. Unless otherwise agreed upon by Henderson and responding agency personnel, Henderson will be the primary emergency response authority for all on-property incidents. In such cases, the agencies/organizations outlined below will have supporting roles, as is requested by the Henderson Emergency Response Coordinator (ERC).

Agency	Agreements/Arrangements
Clear Creek Fire Authority	Henderson has contacted the Clear Creek Fire Authority to verify that they are capable of providing emergency response services in the event of an environmental incident. At this time, neither party believes there is a need for a formal agreement.
Clear Creek County Sheriff's Office	Henderson has contacted the Clear Creek County Sheriff's Office to verify that they are capable of providing emergency response services in the event of an environmental incident. At this time, neither party believes there is a need for a formal agreement.
Clear Creek County LEPC	Henderson has contacted the Clear Creek County LEPC to notify them of the types of hazards that are present at the mine site and verify that additional resources are not required. At this time, neither party believes there is a need for additional resources.
Kremmling Memorial Hospital	Henderson has contacted representatives of Kremmling Memorial Hospital to coordinate responses to emergency medical activities. It has been confirmed that the hospital has the equipment and training required to decontaminate Henderson personnel (with respect to the chemicals located at our facilities) and to handle the types of incidents that may result from a fire or explosion that may occur at the facility. At this time, neither party believes there is a need to document these discussions/arrangements.
Summit Medical Center	Henderson has contacted representatives of Summit Medical Center to coordinate responses to emergency medical activities. It has been confirmed that the hospital has the equipment and training required to decontaminate Henderson personnel (with respect to the chemicals located at our facilities) and to handle the types of incidents that may result from a fire or explosion that may occur at the facility. At this time, neither party believes there is a need to document these discussions/arrangements.
Belfor Environmental	Henderson routinely works with Belfor Environmental personnel. As such they are familiar with the mine site and the hazards that are present. Belfor Environmental has agreed to provide assistance in responding to spills that are too large or hazardous to be controlled and cleaned up with internal resources. An agreement has been developed and executed between Henderson and Belfor.

5.0 TRAINING

5.1 Training

Employees, contractors, visitors, and emergency response personnel receive emergency response training at least once per year as discussed in the facility's IRM.

5.2 Evacuation Drills

Evacuation drills are periodically performed to ensure alarms, communication equipment and procedures effectively enable evacuation of hazardous areas. These drills are further discussed in the facility's IRM.

5.3 Mock Incident Drills

Periodic environmental incident drills are conducted as discussed in the facility's IRM. These drills are performed for training purposes and to verify the effectiveness of Henderson's environmental incident response systems.

5.4 Incident Response Debriefing

Post incident debriefings are held to discuss emergency response activities, share lessons learned and assess areas of opportunity for improvement (tools, preparedness, machinery, etc.). As appropriate based on the outcome of these debriefings, Henderson's incident response procedures are updated to reflect lessons learned.

5.5 Incident Investigation

All safety and environmental incidents are thoroughly investigated to determine their root cause(s) and to assess opportunities for future prevention of similar incidents.

6.0 EMERGENCY RESPONSE PROCEDURES

The facility's IRM details the procedures to be followed in an emergency situation as well as the responsibilities specific to the Emergency Response Coordinator (ERC) and reporting/notification requirements.

7.0 EVACUATION PLANS

Due to the size and complexity of the Mine property, evacuation plans/procedures have been divided into two categories, general procedures and area-specific procedures.

7.1 General Procedures

Immediately upon observing an incident, employees, contractors and visitors are to evacuate the immediate vicinity and call security, if they have a radio, dial any channel "1 through 8" and call the Hoistman. Immediately upon hearing the call, all employees, visitors, and contractors are required to stop what they are doing and listen for further instructions from the Hoistman, observing radio silence in the meantime.

Incipient stage fires or small spills shall be managed in accordance with the facility's Emergency Response Procedure and only by designated and properly trained personnel.

It is improbable that an incident would require evacuation of the entire property. Thus, area-specific evacuation instructions will be conveyed to personnel over the radio.

7.2 Area Specific Evacuation Plans

Area-specific evacuation plans and maps are maintained at individual locations throughout the site. These plans are:

- Reviewed/tested at least once per year by area representatives and Safety Personnel;
- Communicated to employees, contractors and visitors during orientation; and
- Posted throughout the area.

It is the responsibility of the area/department to ensure that contractors and visitors are aware of these plans and procedures

8.0 EMERGENCY RESPONSE EQUIPMENT AND CAPABILITIES

Emergency equipment is located throughout the Mine in close proximity to areas that have an increased risk for potentially harmful releases and incidents. A list of available emergency response equipment is provided in Appendix B. This list includes the location and physical description of the equipment, as well as a brief outline of the equipment's capabilities.

8.1 Emergency Response and Communication Equipment Maintenance and Testing

Emergency response and preparedness equipment is inspected by the area in which it is located, with the exception of annual fire extinguisher inspections, which are contracted to a private company. Preventive maintenance of other critical equipment is managed through Henderson's Preventive Maintenance System (SAP). Emergency response and preparedness equipment is also tested during evacuation drills and mock incident drills, which are discussed in Section 5.0 of this Contingency Plan. Emergency equipment located in the central accumulation area at the Henderson Mine is inspected and tested weekly.

Available emergency response and preparedness equipment is listed in Appendix B and includes telephones, radios, and voice communications.

8.2 Emergency Response Teams & Capabilities

In addition to equipment specific capabilities, which are identified in Appendix B, Henderson Mine has the following internal emergency response organizations and capabilities.

Mine Rescue Personnel are Henderson employees who are available during their regular work shift, but are not on call 24-hours per day. The team consists of individuals trained in emergency medical response, rope rescue, confined space rescue, basic hazardous materials response and vehicle extrication.

Waste Collection Personnel are trained to the hazardous materials technician level and are able to respond to, contain and cleanup small to medium sized environmental releases.

Appendix A

Emergency Contact Information

Appendix A

Emergency Contact Information

EMERGENCY RESPONSE COORDINATOR CONTACT INFORMATION					
Title	**Name**	**Work Phone**	**Cell Phone**	**Home Phone**	**Address**
Primary	Miguel Hamarat	720-942-3255	303-476-3632		On file with security
Secondary	Tim Haynes	720-942-3518	970-216-5744	970-409-9863	On file with security
Backup	Hoistman	720-942-3271			

EMERGENCY NOTIFICATION CONTACTS	
NAME	**EXTENSION**
Hoistman	720-942-3271 or 1-911
Mill Control	720-942-3532
Boiler Operator / Pond Operator (Mill)	720-942-3501

NAME	**EXTENSION**	**HOME PHONE**	**CELL PHONE**
Mitch Kruger	720-942-3638		970-310-7477
Lee Fronapfel	720-942-3227	970-627-8420	303-332-8110
Stuart Teuscher	720-942-3223	970-389-2436	970-389-2436
Eric Nordine	720-942-3336	303-423-6123	720-224-7667
Chris Rizzardi	720-942-3330	303-569-9488	303-471-7715
Weekend Duty Manager if occurrence is on the weekend.			

MINE RESCUE PERSONNEL			
NAME	**TITLE**	**HOME PHONE**	**CELL PHONE**
Albert Archuleta	Coordinator/Instructor	303-258-6012	303-258-6012
Eric Nordine	Instructor	303-567-9189	303-358-8569

Appendix B

Emergency Response Equipment and Capabilities

Appendix B

Emergency Response Equipment and Capabilities

UNDERGROUND EQUIPMENT / CAPABILITY		
EQUIPMENT	**LOCATION**	**CAPABILITIES**
Fire Protection Equipment		
Fire Truck	32A Cutout 92 at 9A 2T at 9 Bay 7065 Shop	Extinguishing of medium/large incipient stage fires
Fire Extinguishers	Various locations throughout facility.	Extinguishing of small incipient stage fires.
450 lbs. of dry chemical	Fire truck/rail flats	Extinguishing of small incipient stage fires.
100 gallons of six% AFFF	Fire truck/rail flats	Extinguishing of small incipient stage fires.
100 feet of twin agent hose	Fire truck/rail flats	Extinguishing of small incipient stage fires.
Three Dragger PA 90's	7700 Fire Truck	Emergency gas protection
Four Dragger PA 90's	7065 and 7500 Fire Truck	Emergency gas protection
Two Dragger PA 90's	Each fire flat	Emergency gas protection
PA90 Refill System	Fire truck/rail flats	Emergency gas protection
First Aid		
First Aid Kits	Various locations throughout facility.	Management of injuries/illness prior to arrival of Emergency Response Team.
Automatic Defibrillators	Various	Resuscitation of cardiac arrest patients.
Medical Oxygen Bottles	Various	Emergency Oxygen supply
Eyewashes and Emergency Showers	Various locations throughout facility.	Decontamination of employees, contractors, and visitors.
Communications		
Bell Phone System	Various	Internal/external notification of incidents, coordination of emergency response activities and requests for assistance.
Radio System	Various	Internal notification of incidents, coordination of emergency response activities and requests for assistance.
Red Gaitronics Phones	Various	Internal notification of incidents, coordination of emergency response activities and requests for assistance.
Voice	Various	Notification of evacuations in the immediate vicinity of an incident and communication during an emergency response.
Spill Response/Containment Equipment		
Heavy Equipment	Various	Constructing containment around large environmental releases.
Spill Kit / Clean Up Materials	Various	Containment and clean up of minor leaks or spills.

Appendix B

Emergency Response Equipment and Capabilities

ABOVEGROUND EQUIPMENT / CAPABILITY		
EQUIPMENT	**LOCATION**	**CAPABILITIES**
Fire Protection Equipment		
Fire Extinguishers	Various locations throughout facility.	Extinguishing of small incipient stage fires.
300 gallons of 3% AFFF	Mine Surface Warehouse	Shower foam system capable of extinguishing flammable chemicals stored in warehouse
First Aid		
First Aid Kits	Various locations throughout facility.	Management of injuries/illness prior to arrival of Emergency Response Team.
Automatic Defibrillators	Various	Resuscitation of cardiac arrest patients.
Medical Oxygen Bottles	Various	Emergency oxygen supply
Eyewashes and Emergency Showers	Various locations throughout facility.	Decontamination of employees, contractors, and visitors.
Communications		
Phone System	Various	Internal/external notification of incidents, coordination of emergency response activities and requests for assistance.
Radio System	Various	Internal notification of incidents, coordination of emergency response activities and requests for assistance.
Voice	Various	Notification of evacuations in the immediate vicinity of an incident and communication during an emergency response.
Spill Response/Containment Equipment		
Heavy Equipment	Various	Constructing containment around large environmental releases.
Spill Kit / Clean Up Materials	Various	Containment and clean up of minor leaks or spills.

Appendix C

Satellite and Central Accumulation Areas

Appendix C

Satellite and Central Accumulation Areas

Central Accumulation Area(s)							
Location	**Waste Type**	**Communications Phone/Radio**	**Fire Extinguishers**	**Source of Fire Water**	**Spill Control Materials**	**PPE**	**Alarms**
Hazardous Waste Storage Building	Hazardous Waste PCB Waste	Phone and Radio	Readily Available	Process Water	Readily Available	Readily Available	Through Gaitronic Phone System

Satellite Accumulation Area(s)							
Location	**Waste Type**	**Communications Phone/Radio**	**Fire Extinguishers**	**Source of Fire Water**	**Spill Control Materials**	**PPE**	**Alarms**