

**PIÑON RIDGE MILL  
EMERGENCY RESPONSE PLAN**

**16910 HIGHWAY 90  
BEDROCK, CO 81411**

**Prepared by:**



**ENERGY FUELS RESOURCES CORPORATION**

**Revised JULY 2010~~OCTOBER 2009~~**

## Table of Contents

1.0	Introduction.....	1
1.1	Facility Description .....	1
1.2	Types of Emergencies .....	3
1.2.1	Fire/Explosion.....	4
1.2.2	Chemical Reagent Spill .....	4
1.2.3	Transportation Accidents.....	5
1.2.4	Loss of Sealed Nuclear Source Containment .....	5
1.2.5	Medical Emergencies.....	5
1.2.6	Severe Weather .....	5
1.2.7	Wildfires.....	5
1.3	Classification and Notification of Incidents .....	6
1.3.1	Alert.....	6
1.3.2	Site Area Emergency .....	6
1.3.3	Notifications .....	7
2.0	Responsibilities .....	9
2.1	Key Individuals by Position .....	9
2.2	Emergency Response Team .....	10
2.3	Off-Site Assistance and Notifications .....	11
3.0	Incident Command System.....	12
4.0	Emergency Response Measures .....	14
4.1	Fire/Explosion.....	14
4.2	Chemical Reagent Spill .....	18
4.3	Transportation Accidents.....	27
4.4	Nuclear Source Containment Loss .....	33
4.5	Medical Emergency.....	36
4.6	Weather Emergency.....	39
4.7	Wildfires.....	41
5.0	Protective Actions.....	44
5.1	On-Site Protective Actions .....	44
5.1.1	Evacuation and Accountability.....	44
5.1.2	PPE and Supplies.....	46
5.1.3	Contamination Control .....	46
5.2	Off-site Protective Actions .....	46
5.3	Exposure Control Program for Emergency Responders .....	46
5.3.1	Radiation Protection Program.....	46
5.3.2	Exposure Guidelines.....	47
5.3.3	Monitoring .....	48
5.4	Medical Treatment.....	49
5.5	Medical Transportation .....	50
6.0	Emergency Response Equipment and Facilities .....	51
6.1	Command Center .....	51
6.2	Communications Equipment.....	51
6.3	On-Site Medical Facilities .....	51
6.4	Emergency Monitoring Equipment, Instrumentation and Supplies .....	52

6.5	Means for Limiting Releases.....	53
6.5.1	Fire/Explosion Protection.....	54
6.5.2	Chemical Spill Prevention .....	54
6.5.3	Nuclear Source Containment.....	55
7.0	Maintenance of Program.....	56
7.1	Maintenance of the Emergency Response Plan.....	56
7.2	Training for Responders .....	56
7.3	Training for Others.....	57
7.4	Drills and Exercises .....	58
7.5	Independent Audit of the Program .....	59
7.6	Letters of Agreement with Off-Site Agencies .....	59
7.7	Emergency Medical Technician Training .....	59
8.0	Records and Reports .....	60
8.1	Records of Incidents.....	60
8.2	Other Records .....	60
9.0	Related Plans and References.....	61

## Tables

Table 1	On-Site Materials List
Table 2	Types of Potential Incidents and Methods of Detection
Table 3	Examples of Initiating Conditions
Table 4	Emergency Response Personnel and Responsibilities
Table 5	Off-site Assistance
Table 6	Reportable Quantities (RQ)
Table 7	Guidance on Dose Limits for Workers Performing Emergency Services
Table 8	Health Effects Associated with Whole-Body Absorbed Doses Received Within a Few Hours
Table 9	Approximate Cancer Risk to Average Individuals from 25 Rem Effective Dose Equivalent Delivered Promptly

## Figures

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Emergency Routes and Exits
	Piñon Ridge Mill Evacuation Plan (24" x 36")

## Appendices

A	Incident Reporting Form
B	Transportation Carrier Emergency Response Procedures

## Definition and Acronyms

AED	Automated External Defibrillator
ALARA	As Low As Reasonably Achievable
amsl	above mean sea level
APCD	Colorado Air Pollution Control Division
BLM	Bureau of Land Management
BZ	Breathing Zone
CDPHE	Colorado Department of Public Health and Environment
COO	Chief Operating Officer
CSP	Colorado State Patrol
EFRC	Energy Fuels Resources Corporation
EPA	U.S. Environmental Protection Agency
ICS	Incident Command System
GM	Geiger Müller
LEPC	Local Emergency Planning Committee
LSA	Low Specific Activity
MC	Material Containment
Mill	Piñon Ridge Mill
MSDS	Material Safety Data Sheet
MSHA	Mine Safety & Health Administration
Nal	Sodium iodide
OPS	Colorado Division of Oil and Public Safety
PA	Public Announcement
PM <sub>10</sub>	Particulate Matter less than 10 microns
PPE	Personal Protective Equipment
QA	Quality Assurance Officer
rad	Radiation Absorbed Dose
rem	Roentgen Equivalent in Man
RH	Radiological Health (prefix for procedure)
RQ	Reportable Quantity
RSO	Radiation Safety Officer
RST	Radiation/Security Technicians
RWP	Radiation Work Permit
SCBA	Self-contained Breathing Apparatus
SMPA	San Miguel Power Association
SPCC	Spill Prevention, Control and Countermeasure
SX	Solvent Extraction
TSP	Total Suspended Particulate
U <sub>3</sub> O <sub>8</sub>	Uranium Oxide (also referred to as yellowcake)
USDOT	U.S. Department of Transportation

Watch (weather) – A situation in which meteorological conditions are such that a severe weather condition is possible

Warning (weather) – A situation in which severe weather is imminent

## **1.2 Facility Access**

Access to the Mill site is by State Highway 90 at the main entrance located at milepost 23. Access to Paradox Valley is by three primary routes: from the east via State Highway 90, from the west via State Highway 90, and from the north via County Road Y11 off of State Highway 141 near Uravan.

Access to the site could be hampered due to a variety of emergencies including fire/explosion, chemical release, transportation accident, severe weather or wildfire emergency. There are numerous alternate access routes through and around Paradox Valley. Many of the routes include four wheel drive roads that may not be accessible by all emergency vehicles or during inclement weather. Local emergency responders are aware of possible routes in and around Paradox Valley and are responsible for choosing the most appropriate route into and through the valley in an emergency situation.

The main entrance to the Mill will be the primary access point to the site whenever possible. In the event that the main entrance to the Mill site is impassable, several alternate routes to the Mill property are available. Access to the site by an alternate route requires Mill personnel to unlock gates at alternate access points and to provide an escort onto the Mill site. Advanced notice of alternate site access is required to necessitate these actions. Alternate access routes to the Mill property are listed below and shown on Figure 1.

Northwest Access Point – Turn south off Highway 90 onto unnamed ranch road located 0.9 mile west of Mill main entrance onto private property (Cooper Property). Follow 0.4 mile to northwest access point.

West Access Point – Turn south off Highway 90 on unnamed ranch road located at off-site air monitor station #4 (14700 State Highway 90 at milepost 20.2) onto private property (Cooper Property). Follow south and southeast for 2.0 miles, stay right at fork and follow 0.8 mile to west access point.

East Access Point – Turn south off Highway 90 onto County Road CC17, located 1.0 mile east of Mill main entrance. Follow south for 0.2 mile, stay right at fork and follow due west for 0.6 mile to east access point.

South Access Point – Turn south off Highway 90 onto County Road CC17, located 1.0 mile east of Mill main entrance. Follow south for 0.2 mile, stay left at fork and follow southwest and west for 1.8 mile to south access point.

Monogram Mesa Access – There is no direct access to the Mill property from Monogram Mesa. However, it offers a good visual perspective of the Mill property and may facilitate emergency response coordination in some situations. Turn south off Highway 90 onto County Road DD19, located 2.8 mile east of Mill main entrance. Follow south and southwest for 3.4 miles where it merges onto County Road EE16, follow for 0.2 mile and stay right onto County Road DD16. Mill property is north of this location. There is no direct access to Mill property from Monogram Mesa.

## **1.23 Types of Emergencies**

Types of incidents that have the potential to occur at the Mill include fire/explosion, chemical reagent release, transportation accidents, nuclear source containment loss, medical

emergencies, ~~and~~ severe weather, ~~and~~ wildfires. Because of potential radiation emissions associated with an emergency, most emergency response actions will be handled by trained personnel with the assistance of the Mill Radiation Safety Officer (RSO) or Assistant RSO. Energy Fuels will maintain contact with local agencies and would envision these agencies assisting in providing fire protection, hazardous materials response, and/or medical assistance in an emergency. However, the emergency response facilities located at the Mill are substantial and anticipated to be capable of handling most emergencies without off-site assistance. Primary on-site medical facilities include a First Aid Station, ambulance, and helipad. Refer to Section 6.3 for a more detailed description of these facilities.

Table 2 indicates the methods by which incidents are detected at the Mill.

**Table 2  
Types of Potential Incidents and Methods of Detection**

Type Of Emergency	Detection Method
Fire/explosion	Visual observation by personnel and/or fire detection system
Chemical Spill	Visual observation by personnel and/or automated alarm
Transportation Accident	Notification by transportation contractor or law enforcement agency
Nuclear Source Containment Loss	Visual observation by personnel and/or radiation survey
Medical	Notification by personnel
Severe Weather	Visual observation by personnel or notification by local warning systems
<u>Wildfires</u>	<u>Visual Observation by personnel</u>

A summary of each type of postulated incident above is provided below:

**1.23.1 Fire/Explosion**

Fire/explosions are detected by integrated fire detection systems and/or by direct observation. Most fire/explosion emergencies can be handled by personnel in the area or on-site emergency response personnel. Details of appropriate response measures are located in Section 4.1 of this plan.

**1.23.2 Chemical Reagent Spill**

Chemical reagent spills are detected by visual observation by personnel or by alarm systems. Most spills of chemicals can be handled by personnel in the area or on-site emergency response personnel. Details of appropriate response measures for specific chemical reagents

are provided in the Material Containment Plan. Section 4.2 of this plan provides general instructions for response to any chemical reagent spill.

### **1.23.3 Transportation Accidents**

Transportation accidents are immediately reported by the driver of the vehicle, personnel witnessing the accident, or emergency responders at the scene of the accident. Response to transportation accidents occurring on the Mill property will be handled by Mill personnel, on-site emergency response personnel, and, if necessary, off-site emergency responders. Accidents occurring off the Mill property are handled by the appropriate off-site emergency responders and contracted emergency responders. Mill personnel may provide assistance and provide consultation depending on the location and circumstances of the accident. In particular, Mill personnel may assist with radiological screening, surveying, and clean-up at an off-site accident location involving radioactive material. Details of appropriate response measures are located in Section 4.3 of this plan.

### **1.23.4 Loss of Sealed Nuclear Source Containment**

The Mill will use density gauges containing nuclear material in the Mill facility buildings and areas. These are the only instruments at the plant using sealed nuclear sources. Any incidents leading to damage of a nuclear density gauge are to be reported immediately to the RSO or Assistant RSO. In addition, the Safety Department conducts inventory, leak tests and shutter tests of the gauges every three years. Details of appropriate response measures are located in Section 4.4 of this Plan.

### **1.23.5 Medical Emergencies**

Medical emergencies can result from medical conditions or from an injury occurring on the Mill property. Medical emergencies are to be reported immediately to the Safety Department by the personnel experiencing the emergency or other personnel. In most cases, on-site emergency personnel will be able to attend to the medical emergency and transfer ill or injured personnel to the Basin Clinic or regional hospital. Details of appropriate response measures are located in Section 4.5 of this plan.

### **1.23.6 Severe Weather**

Severe weather has the potential of occurring in the area of the Mill. Types of severe weather that have the potential to initiate an emergency include heavy rain, lightning, flooding, hail, heavy snow, high winds, and tornadoes. Detection of the severe weather will be by visual observation by Mill personnel and/or by warnings provided by local authorities. Most severe weather situations will restrict outdoor activities only. In rare cases, Mill personnel may be instructed to take cover in the buildings in which they are currently located. Details of appropriate response measures are located in Section 4.6 of this plan.

### **1.3.7 Wildfires**

The Mill is located in an area with a moderate to substantial potential for wildfires. For the purposes of this plan, wildfires are limited to those fires outside of the restricted area. Fires

breaching the restricted area will be treated as a fire/explosion and appropriate measures are outlined in Section 4.1. Detection of wildfires will be by visual observation by Mill personnel. Most wildfires will affect outdoor operations only. Details of appropriate measures are located in Section 4.7 of this plan.

### **1.34 Classification and Notification of Incidents**

Incidents at the Mill are classified as either an “Alert” or a “Site Area Emergency”. In general, the alert classification is issued for incidents that have little or no off-site impacts and the site area emergency classification is issued for incidents with potential off-site impacts. Each incident will be evaluated by the appropriate on-site emergency response personnel (see Sections 4.1 to 4.6) and a determination of the classification of the emergency will be made on a case-by-case basis.

#### **1.34.1 Alert**

An alert is defined as an incident that has led or could lead to a release to the environment of radioactive or other hazardous material, but the release is not expected to have significant off-site impacts. An alert may require mobilization of the Mill emergency response personnel or off-site emergency responders or involve severe exposure or injury to on-site personnel, but does not indicate an expectation of off-site consequences.

Alerts will be authorized by the Mill Incident Commander and are announced to Mill personnel and other on-site emergency responders involved via the public announcement (PA) system, handheld radios, and/or telephone. Off-site emergency responders, if necessary, are notified of alerts via telephone or cellular phone. Initial and follow-up notifications to the CDPHE and other off-site agencies are conducted under direction of the RSO as necessary.

#### **1.34.2 Site Area Emergency**

A site area emergency is defined as an incident that has led or could lead to a release to the environment of radioactive or other hazardous material and that could require emergency responders to protect off-site persons or property.

Site area emergencies are authorized by the Mill Incident Commander and are announced to Mill personnel and other on-site emergency responders involved via the PA system, handheld radios, and/or telephone. Off-site emergency responders are notified of site area emergencies via telephone or cellular phone. Potentially affected residents in the vicinity of the Mill site may be notified by the Montrose County Sheriff’s Office via reverse 911 calls.

Table 3 describes examples of conditions that may cause initiation of an alert or a site area emergency.

**Table 3  
Examples of Initiating Conditions**

<b>Type of Incident</b>	<b>Alert Conditions</b>	<b>Site Area Emergency Conditions</b>
Fire/explosion	May effect radioactive material or safety systems	Involves radioactive material or compromises safety systems
Chemical Reagent Spills	Spill that is contained within the Mill site and does not cause an uncontrolled airborne release of radioactive material or hazardous gases	Spill beyond the property boundary or involving an uncontrolled airborne release of radioactive material or hazardous gases
Transportation Accident	Does not include an uncontrolled release of radioactive or hazardous materials	Includes an uncontrolled release of radioactive or hazardous materials
Nuclear Source Containment Loss	Minor loss of containment that can be contained or controlled in a timely manner by on-site personnel	Loss of containment that cannot be contained or controlled in a timely manner by on-site personnel
Medical Emergency	Involves injuries, medical conditions, and number of injured personnel that are within the capabilities of the on-site medical facilities	Involves injuries, medical conditions, or number of injured personnel beyond the capabilities of the on-site medical facilities
Severe Weather	May affect radioactive material or safety systems	Compromises safety systems or the integrity of radioactive
<u>Wildfire</u>	<u>Involves a wildfire outside of the license boundary</u>	<u>Involves wildfires that breach the property boundary and may threaten Mill buildings</u>

### **1.34.3 Notifications**

The regulatory agencies that are to be notified are listed for each type of incident in Sections 4.1 to 4.67. The contact numbers for Mill emergency response personnel, local emergency responders and off-site agencies are located in the front of this plan. Initial incident notifications will be made to the Control Room and then forwarded to the Mill Incident Commander.

Notification will include the following information:

- the type and available specifics of the incident,
- any injuries, and
- any initial actions that have already taken place.

Initial notifications are made by telephone. The Incident Reporting Form in Appendix A includes the information that needs to be reported during the initial notification of an incident.

Follow-up incident reports are more detailed than the initial notifications and are prepared under the direction of the Vice president of Regulatory Affairs in accordance with the CDPHE Rules and Regulations Pertaining to Radiation Controls, 6 CCR 1007-1 Sections 4.51 through 4.54,

where applicable. Follow-up reporting may be sent via facsimile, email, or postal service, as requested by the recipient agency.

For details of follow-up incident report and record keeping requirements, refer to Section 8.1.

### 3.0 Incident Command System

To effectively manage incidents, emergency responders implement what is called the “Incident Command System” (ICS). This system provides an organizational structure, builds safety into the system to protect emergency responders and the public, and effectively uses needed resources. The ICS is implemented during any situation encountered by Mill personnel in which off-site assistance is determined to be necessary or unnecessary. It also provides for an easy transition between persons in command. This system is applied to manage all situations that involve fire/explosion, chemical spills, transportation accidents, nuclear source containment loss, medical emergencies, ~~and~~ severe weather, and wildfires.

Note: This system must be understood by Mill personnel who respond to off-site requests for emergency assistance involving radioactive material shipment accidents since this system is used at emergency scenes by public sector emergency responders under the requirements of OSHA and EPA hazardous material emergency regulations.

Whenever an incident occurs on the Mill site, the ICS will be activated by the Mill Incident Commander. The Mill Shift Foreman or General Mill Foreman assumes the role of the Mill Incident Commander until such a time that command may be transferred to other responders.

#### The Mill Incident Commander:

- Assumes command of the incident and all response actions,
- Reports to the emergency scene to assess the emergency situation,
- Takes action to account for all personnel, contractors and visitors and to respond to injuries as needed
- Develops an action plan,
- Determines the need for off-site assistance, and
- Gives directions to mitigate the emergency.

Mill standard operating procedures will be followed. Depending on the type of emergency, the Mill Incident Commander determines the command staffing needed to manage the incident and the need for emergency responders. The Mill Incident Commander will also establish a command post location and wear an incident commander “IC” vest.

If warranted, the RSO or Assistant RSO will prepare a scene safety plan for review by the Mill Incident Commander and emergency responders as necessary.

Other positions that are staffed as needed during an incident to address:

- Safety
- Operations
- Planning
- Logistics
- Administration
- Command Support
- Staging
- Public Information Distribution
- Site Liaison
- HazMat Operations Supervision
- Entry Team Supervision

- Decontamination Supervision
- Support Team Supervision
- Research
- Medical Treatment
- Security
- Radiation Safety
- Environmental Coordination

Most incidents require only the Mill Incident Commander and the safety positions to be staffed. Mill management team members, upon their arrival at the emergency scene, are to support the Mill Incident Commander as needed. Mill management team members will not assume the role of Mill Incident Commander unless they have been trained to do so. Mill management team members will keep the Energy Fuels corporate office personnel updated on the status of the incident as needed.

If off-site emergency response from the fire department is required, a transfer of command will be made between the Mill Incident Commander and the senior responding officer when the fire department arrives at the Mill. The former Mill Incident Commander will work closely with and assist the fire department incident commander with information on Mill buildings, building floor plans, hazards, processes and safety concerns. When the fire department leaves the Mill site, command will be transferred back to the Mill Incident Commander to terminate the emergency. Transfer of command is always done in a face-to-face meeting between the Mill Incident Commander and fire department officers/incident commanders.

The Mill Incident Commander will review emergency specific procedures in Sections 4.1 to 4.6-7 (such as fire/explosion, chemical spills, transportation accidents, nuclear source containment loss, medical emergencies, ~~and~~ severe weather, and wildfires) for actions to be taken and job assignments that are to be made.

The Mill Incident Commander ensures that RSO, assistant RSO, and RSTs will be involved in equipment and personnel monitoring for radiation and chemical exposure. Monitoring is performed such that the safety of the individuals performing the monitoring is not compromised and life-saving efforts are not impeded.

The Mill Incident Commander will ensure through the Safety Department that all personnel and equipment are monitored prior to leaving the site. In the event that injured people are being transported to the hospital, monitoring will be conducted based on the degree of injury. In the event of a life and death situation, monitoring can be conducted on equipment and personnel at the hospital when possible. **Under no circumstances will monitoring supersede life-saving efforts.**

When the emergency has been adequately addressed, the Mill Incident Commander will terminate command and declare that the emergency is over. Follow-up documentation and reports will be prepared in accordance with Section 8.1.

- continue to assess the growth and spread of the fire and contact off-site support as necessary.

If warranted, the local fire department will be contacted by dialing 911. The fire department will request the following information:

- the fire/explosion location, type, and size
- any injuries, and
- any initial actions that have already taken place.

Wherever possible, efforts will be made to prevent an on-site fire from causing a wildfire. These efforts may include making a firebreak or wetting surrounding vegetation. If an on-site fire does cause a wildfire, the measures outlined in Section 4.7 will be employed.

If support of the fire department is necessary, the Mill Incident Commander will instruct the Security Guard on duty to allow entrance of off-site emergency responders and arrange for an escort to take them to the scene of the incident. Upon arrival, the Mill Incident Commander will turn over command of the fire/explosion emergency to the senior fire department officer and will provide whatever assistance possible.

The Mill Incident Commander will contact appropriate supervisors and management personnel to account for evacuated personnel (see Section 5.1.1).

The Mill Incident Commander will assign personnel to make the necessary off-site agency notifications as required by the specifics of the incident outlined above.

The Mill Incident Commander will assign personnel to begin calling, by phone or hand-held radio, management personnel and other personnel as necessary to notify them of the fire/explosion or to request that they return to the Mill to assist with the incident.

If water from fire hydrants is going to be used for the fire emergency, the Mill Incident Commander will assign personnel to monitor the operation and fuel level of the diesel driven fire pump and the level of the water in the tank supplying water to fight the fire.

In buildings that have fire suppression systems, the Mill Incident Commander will check on the operation of those systems, if the size of the fire/explosion is large enough to cause the system to operate. The following buildings contain fire suppression systems:

- Solvent Extraction Building (mister)
- Change House/Laboratory Building (sprinkler)
- Warehouse (sprinkler)
- Administration Building (sprinkler)

After a fire is extinguished, the Mill Incident Commander will ensure that all fire suppression equipment and systems are recharged, replaced, or returned to normal operation or status as soon as practical.

### **Monitoring and Incident Follow-up**

Safety Department personnel will monitor for radiation and/or chemical exposure as necessary. Monitoring will be performed such that the safety of the individuals performing the monitoring will not be compromised. Radiation contamination on all personnel and equipment involved in the emergency response will be monitored prior to leaving the site. See the Health & Safety

Plan for procedures for Release of Equipment to Unrestricted Areas (RH-070); Beta and/or Gamma Exposure Rate Surveys (RH-110); Alpha Beta Gamma Contamination Surveys (RH-120); and Personnel Release Surveys(RH-200).

In the event that injured people are being transported to the hospital, monitoring will be conducted based on the degree of injury. In the event of a life and death situation, monitoring can be conducted on equipment and personnel at the hospital, when feasible. **Under no circumstances will monitoring supersede life saving efforts.**

If smoke from a fire/explosion is leaving the Mill property, monitoring for radiation or toxic chemicals will be conducted. This monitoring can be accomplished with the use of colorimetric gas tubes (for chemical concentration) combined with the analysis of the perimeter air monitoring filters.

All water runoff within the Mill is contained and controlled. Runoff generated during fire fighting operations is to be controlled and pumped to one or both of the stormwater ponds. If smoke from a fire/explosion leaves the Mill property, then monitoring should be conducted for radiation or other toxic chemicals as necessary.

In the event that sample results indicate that personnel could have been exposed to levels in excess of regulatory limits or if individuals exhibit symptoms of chemical exposure, then these individuals will be referred to the local hospital for evaluation by staff physicians. Exposure of off-site individuals will be evaluated in the same manner.

The Mill Incident Commander will determine when the incident has ended and the plant can return to normal operations. He will then assign personnel to notify the appropriate agencies that the incident is over.

Safety Department personnel will investigate the cause of the fire/explosion and develop corrective measures to prevent future occurrences.

Follow-up reporting of the incident to regulatory agencies will be conducted under the direction of the Vice President of Regulatory Affairs.

## 4.7 Wildfires

### General Response Procedures:

- Initial assessment by Mill personnel at the scene
- Notification of wildfire to the Mill Control Room by personnel
- Announcement of wildfire and location over the Mill PA and hand-held radios
- Advise personnel to take precautions
- Initiation of the Incident Command System
- Assessment of the wildfire
- Notification of the fire department or BLM for assistance, if necessary
- Incident response to extinguish or control the fire
- Termination of the incident

### Notifications and Reporting (see front of plan for contact information):

<u>Position/Agency</u>	<u>Situation</u>	<u>Time</u>
<u>Mill Incident Commander (Shift Foreman on duty or General Mill Foreman)</u>	<u>All wildfires</u>	<u>Immediately</u>
<u>Radiation Safety Officer or Assistant Radiation Safety Officer</u>	<u>All wildfires located within the license boundary</u>	<u>Immediately</u>
<u>Local Fire Department (911) and/or BLM wildfire reporting line</u>	<u>If off-site assistance is required</u>	<u>Immediately</u>
<u>MSHA Reporting Line</u>	<u>Incident results in death or injury which has a reasonable potential to cause death</u>	<u>Immediately</u>

Wildfires breaching the property boundary should be treated as a fire/explosion and the measures outlined in Section 4.1 should be employed.

All agencies notified of the incident initially should be notified again when the emergency has been terminated and the plant is back in compliance and operating.

MSHA may require a written follow-up report.

### Mill personnel will take the following actions:

Notify the Mill Control Room of the wildfire. The Mill Incident Commander will go to the location of the wildfire and, if warranted, an announcement with instructions will be made to personnel over the Mill PA system and hand-held radios.

Attempt to control and/or extinguish incipient fires. An "incipient fire" is a fire in the initial or beginning stage and which can be controlled or extinguished with portable fire extinguishers or small hose systems without the need for protective clothing and breathing apparatus. Efforts to control and/or extinguish an "incipient fire" using a portable fire extinguisher will be based on your personal training and only attempted if:

- you can identify the “class of fire” burning (Class A, B, C, D, or K);
  - Class A: Ordinary Combustibles
  - Class B: Flammable liquids and gases
  - Class C: Electrical Equipment
  - Class D: Combustible Metals
  - Class K: Cooking Oils and Fats
- there is a portable fire extinguisher in the immediate area, which is “rated” for the class of fire that is burning;
- your life and safety is not in danger and your evacuation path is not blocked by the smoke and heat from the fire (If your life or safety is in danger or the evacuation path is impacted, then evacuate the area immediately to the Assembly Area);
- you have been trained to use the portable fire extinguisher and extinguish fires; and
- the fire is still in the incipient stage or can be defined as “incipient”.

Follow instruction as provided by the Mill Incident Commander upon arrival.

**The Mill Control Room will initiate the Incident Command System and the following actions will be taken:**

Notify the Mill Incident Commander.

The Mill Incident Commander will proceed immediately to the location of the wildfire and will:

- meet with the person that has discovered and reported the wildfire;
- evaluate the growth and spread of the wildfire, the potential to breach the restricted area and become a fire/explosion;
- determine if off-site support from the fire department or BLM is necessary;
- evaluate whether or not evacuation of any Mill site buildings will be required;
- determine measures that can be taken to prevent an off-site wildfire from breaching the restricted boundary;
- assume command of the emergency until the arrival of the fire department or BLM, if necessary; and
- continue to assess the growth and spread of the fire and contact off-site support as necessary.

If warranted, the local fire department or the BLM wildfire reporting line will be contacted. The operator will request the following information:

- the wildfire location and size
- any injuries, and
- any initial actions that have already taken place.

Off-site wildfires will be controlled primarily by the local fire department and/or BLM. Mill emergency response personnel may provide assistance upon request as long as the capacity to control the fire if it reaches the license boundary is not compromised. The first priority of Mill emergency response personnel will be to protect the Mill facilities on the Mill property.

If support of the fire department and/or BLM is necessary, the Mill Incident Commander will instruct the Security Guard on duty to allow entrance of off-site emergency responders and arrange for an escort to take them to the scene of the incident. Upon arrival, the Mill Incident Commander will turn over command of the wildfire emergency to the senior fire department officer and will provide whatever assistance possible.

The Mill Incident Commander will assign personnel to make the necessary off-site agency notifications as required by the specifics of the incident outlined above.

The Mill Incident Commander will assign personnel to begin calling, by phone or hand-held radio, management personnel and other personnel as necessary to notify them of the wildfire or to request that they return to the Mill to assist with the incident.

If water from fire hydrants is going to be used for the wildfire emergency, the Mill Incident Commander will assign personnel to monitor the operation and fuel level of the diesel driven fire pump and the level of the water in the tank supplying water to fight the fire. Sufficient water will be reserved to protect the Mill buildings and structures.

After a fire is extinguished, the Mill Incident Commander will ensure that all fire suppression equipment and systems are recharged, replaced, or returned to normal operation or status as soon as practical.

### **Monitoring and Incident Follow-up**

Because wildfires only include those fires that are outside of the restricted area, there is very little likelihood of chemical or radiological exposure associated with a wildfire.

In the event that monitoring results indicate that personnel could have been exposed to levels in excess of regulatory limits or if individuals exhibit symptoms of chemical exposure, then these individuals will be referred to the local hospital for evaluation by staff physicians. Exposure of off-site individuals will be evaluated in the same manner.

The Mill Incident Commander will determine when the incident has ended and the plant can return to normal operations. He will then assign personnel to notify the appropriate agencies that the incident is over.

Safety Department personnel will investigate the cause of the wildfire and develop corrective measures to prevent future occurrences if the wildfire was caused by Mill operations.

Follow-up reporting of the incident to regulatory agencies will be conducted under the direction of the Vice President of Regulatory Affairs.

## **5.0 Protective Actions**

### **5.1 On-Site Protective Actions**

#### ***5.1.1 Evacuation and Accountability***

Evacuations may be required in response to incidents involving hazardous materials, fire/explosions, wildfires, equipment failure (such as a storage tank), bomb threats or unusual radiation levels. Individual personnel, management team members, the Mill Incident Commander or the fire department may initiate a building or site evacuation.

An announcement of an evacuation will be made over the Mill PA system. If warranted, off-site emergency responders will be notified by calling 911. Notification may also be made using the phone system or hand-held radios.

#### **Assembly Areas**

Upon hearing the evacuation announcement, personnel, contractors and visitors will immediately leave the building and proceed to the Primary or Alternate Assembly Area, as directed (See Figure 3). Evacuation announcements will direct evacuees to the Alternate Assembly area if safety at the Primary Assembly Area is compromised due to the incident or any other reason. The Assembly Area locations are:

##### Mill Facility Assembly Areas

- Primary - Personnel parking lot in front of (south of) the change house. Access from facility buildings is available through change house.
- Alternate – West of the Truck Shop on west side of Mill facility. Access is available through the Truck Shop.

##### Administration Building Assembly Areas

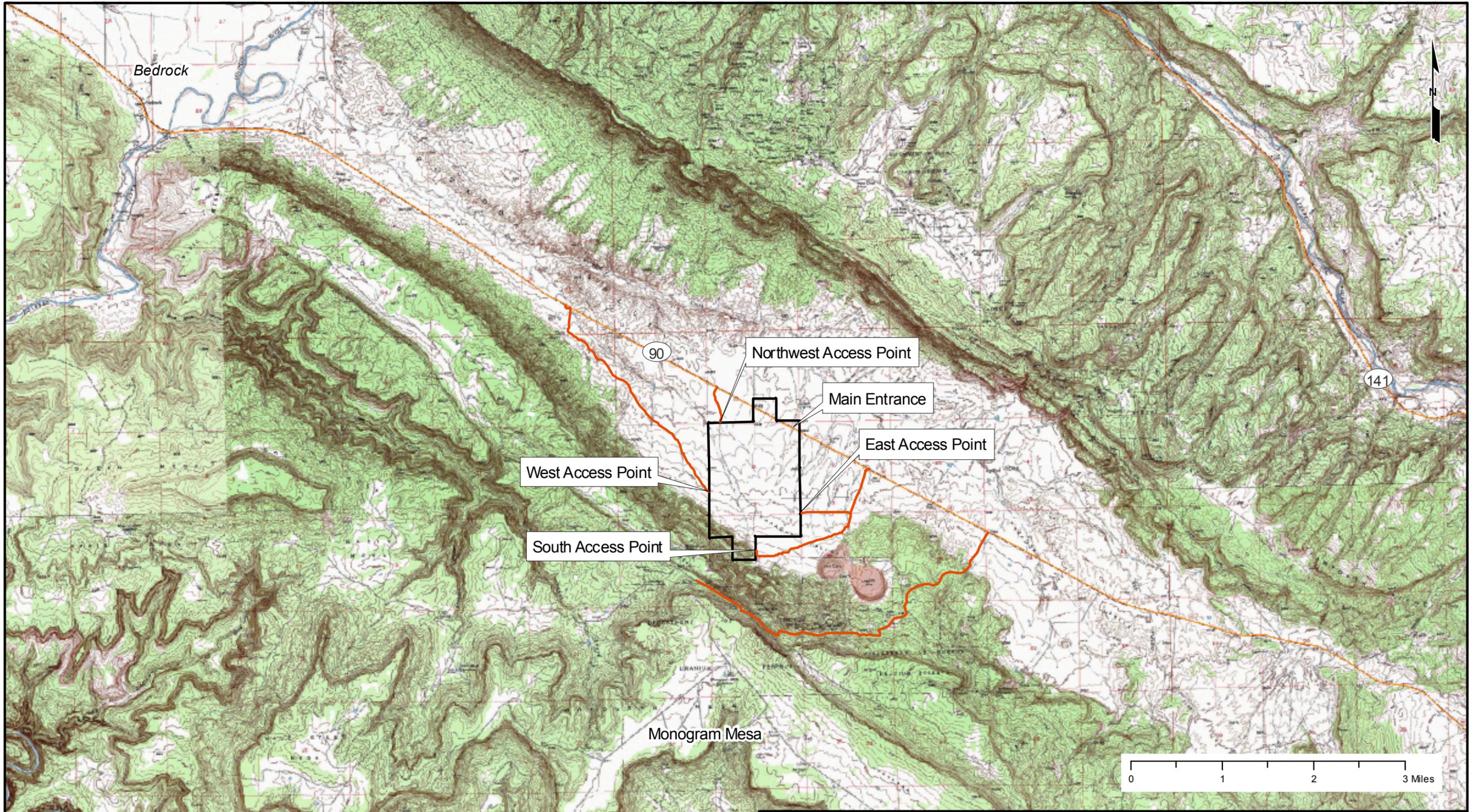
- Primary – Front parking area southwest of the administration building. Access from building through nearest safe exit.
- Alternate – Side parking area north of the administration building. Access from building through nearest safe exit.

Mill personnel, visitors, and contractors should not leave the Mill site until they are directed to unless they are in imminent danger.

#### **Evacuation Routes**

The Mill facility is large and various evacuation routes are available. Primary evacuation routes or exits may be blocked by fire, smoke, or leaks and spills involving hazardous materials. Because routes and exits can be blocked, people should be familiar with multiple exit pathways out of Mill buildings. Evacuees should choose the most direct and safest route, which will depend on their location and the location and severity of the incident. Upon exiting a building during a chemical (hazardous material) or fire/explosion emergency, people should check windsocks located on the Mill site for wind direction and proceed 90 degrees away from the

## **FIGURES**



**Legend**

- Project Boundary
- Alternate Access Routes



**Energy Fuels  
Resources Corporation**

PROJECT	Pinon Ridge
DRAWN:	7/2/10
DRAWN BY:	Z.Rogers
CHECKED BY:	
FILE NAME:	ERP_Fig1_070210.mxd

<b>Site Location Map</b>
ENERGY FUELS RESOURCES PIÑON RIDGE MILL SITE MONTROSE COUNTY, COLORADO
ORIGINATOR: Z.Rogers
APPROVED BY:

FIGURE

**1**