


Refuge Alternatives

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A stylized, dark teal silhouette of a mountain range is located in the bottom right corner of the slide, extending from the right edge towards the center.


Factors Affecting Decision to Purchase

- ◆ Size constraints of unit
 - 9' x 16' x 32"
- ◆ Area inside tent when deployed
 - Temperature
- ◆ Quality of tent when deployed
 - Outer shell
 - Infrastructure
- ◆ Manufacturer experience
 - Mining industry
 - Units in service
 - Good service experience

Purchase

- ◆ AL Lee Model 3236-30 Rescue Chamber
 - Unit size 9' x 16' x 32"
 - Tent size 14' x 30' x 36"
 - Rated at 30 persons
 - Purchased 12 units for sections
- ◆ Built units consisting of "15 psi" stoppings for outby areas
 - 8" wet laid block

Emergency Response Plan (Section Units)


- ◆ Located in an area with adequate roof conditions
 - ◆ Location shown on mine map and escapeway map
 - ◆ Miners will be trained
 - ◆ Manufacturer's Specifications
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- A stylized, dark teal mountain range graphic is located in the bottom right corner of the slide, extending from the right edge towards the center.

Emergency Response Plan (Outby Units)

- ◆ First unit located within 6600' of surface
 - 6600' between units
 - Outby workers within 3300'
- ◆ Maximum 4 persons
- ◆ Approximately 1100 cubic feet

Emergency Response Plan (Outby Units)

◆ Supplies

- Oxygen and air cylinders
 - Soda Lime curtains
 - MREs or equivalent food and drinking water
 - First aid kit
 - Light sticks
 - Sealant material
 - Blankets
 - Chemical toilet and supplies
 - Hand pump and chemical tubes
 - Reading and writing material
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- A stylized, dark teal silhouette of a mountain range is positioned in the bottom right corner of the slide, partially overlapping the text area.

Outby Units



Transportation

- ◆ Skid mounted with perimeter protection
- ◆ Scoop and chains
 - Hook to back and drag
- ◆ Average 3 weeks between moves
- ◆ 1 shift or less



Transportation Issues




- ◆ Tow bars
 - Very heavy
 - Adds 83" in length
 - Can turn 90 deg.

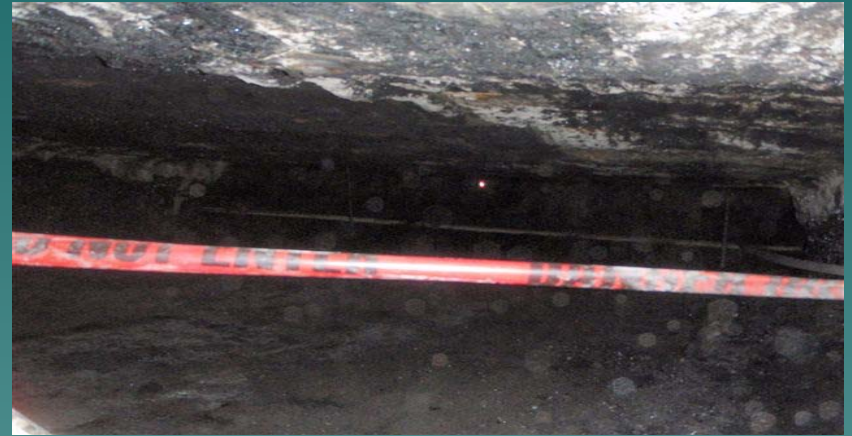


- ◆ Wheel kits
 - Can dig into bottoms
 - More difficult to maneuver
 - Add 3 - 5" in height
 - Add 10 - 12" in width

Placement

- ◆ Area with good roof and rib conditions
 - ◆ Dry
 - ◆ Relatively level
 - Rolling, hilly conditions may present problem with tent
 - ◆ Mark off perimeter for tent deployment to keep clear
 - ◆ Not within direct line of face or future development
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Placement



Inspections (Section)

- ◆ Preshift Inspections
 - Check roof, ribs and perimeter of unit
 - Seals, gauges
 - Assure tent deployment area not blocked
- ◆ Weekly Inspections
 - Open door and break seal
 - Equipment inside
 - Cylinder Gauges
 - Communications
- ◆ Six month Inspections by manufacturer

Inspections (Section)



Inspections (Outby)

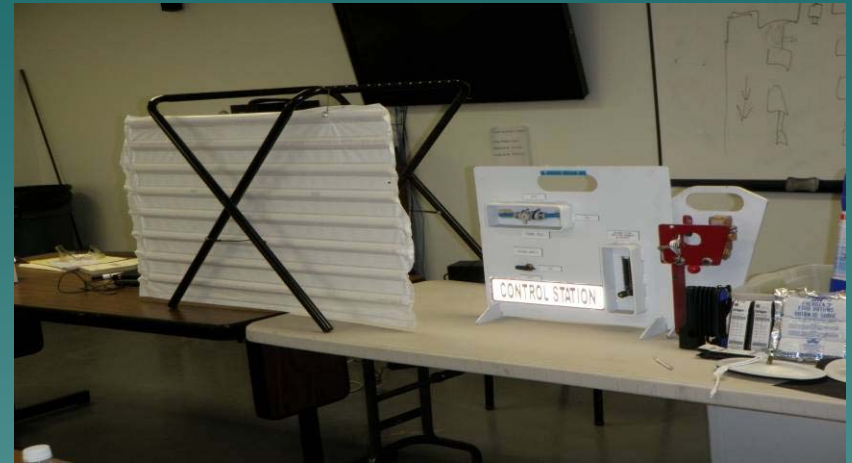
- ◆ Preshift examination
 - Roof and rib conditions
 - Assure all materials intact
 - Date board inside
- ◆ No weekly examination required
 - Check communication

Miscellaneous Issues

- ◆ Caps difficult to remove on outby cylinders
 - Oil filter wrench
- ◆ Not in line with working face
- ◆ 500' radial distance
- ◆ Deactivating to transport between mines



Training



Training

- ◆ Where to place training unit?



Training



Training



Questions?

