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Presented by Joe Spiker, Director, West Virginia University Mining Extension, at the Energy Forum: “A Discussion of West Virginia’s New Mine Safety Rules,” March 1, 2006, in Charleston, WV.

Training Challenges?

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General Consensus:

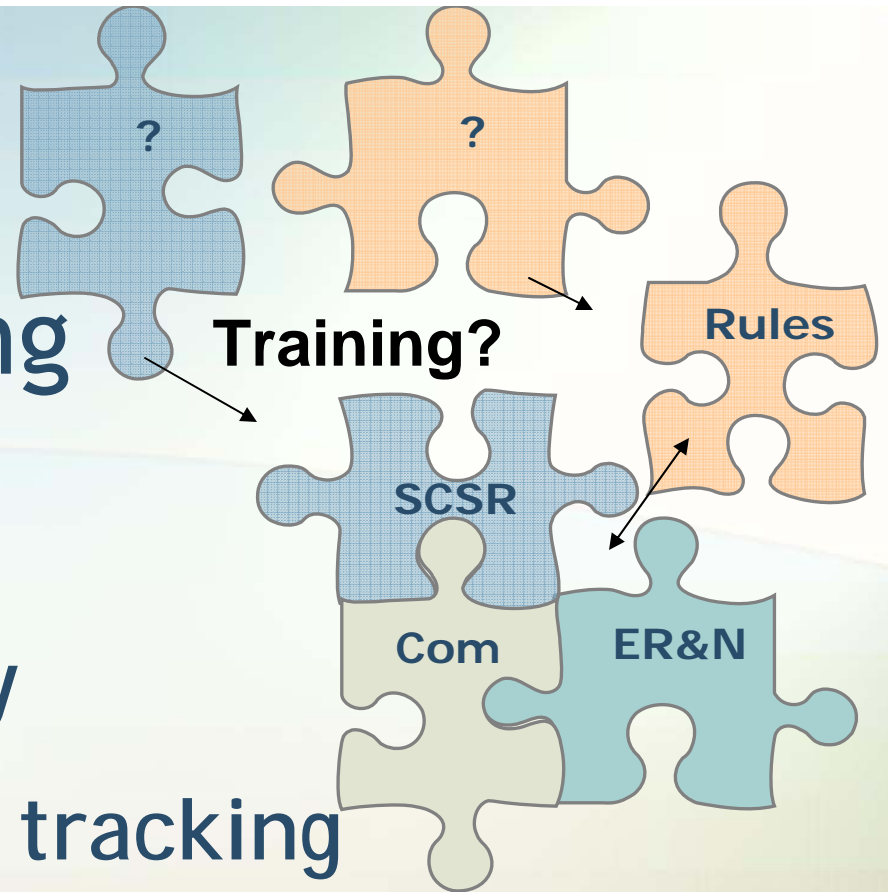
***TRAINING** is a significant factor for successful implementation of new rules/procedures & technologies.*

Agenda

- **Training Requirements**
 - Joe Spiker
- **Training Planning & Resources**
 - Allyn Sue Barker

Overview of Training Requirements

- Emergency air supply
- Communications and tracking
- Emergency notification & rapid response



Emergency Air Supply

- Section 56-2-5(5.2) Statement of training dates for the use of SCSR's
 - Location of SCSR's ?
 - How to change out SCSR's in hazardous environments ?
 - How to know when a SCSR is about to expire ?
 - What procedures to follow in the event of fire or explosion (lifelines, escape, barricade, etc.) ?
 - Frequency of training ?

Communications & Tracking

- Section 56-2-7(1.3) Training and refresher training each miner on the use of the wireless communication device
- Section 56-2-8(1.4) Training and refresher training on the use of the wireless tracking device

Emergency Notification & Response

- Part of the mine's Emergency Response Plan
 - Mine and Industrial Accident Rapid Response System training (Senate Bill 247)
- Mine Emergency Evacuation and Firefighting Program (CFR 75.1502)

Training: *Simulate Mine Emergency Situations?*

- How close to 'realistic' mine emergency situations can miners/others be trained
- *SIMULATION TECHNOLOGY?*
 - Miners trained to make the best decisions based on the situation & information available
 - Similarly, for response/support personnel (media?)
- 'Mock' emergency situation exercises
 - Australian example (from Roundtable)

Training Planning: *Tailored Training?*

- Generic + Site Specific Training
- Specific mine conditions?
 - Small/large mines; Seam thickness; other
- Compatibility/interoperability of new technologies with current systems?

Training Planning: Logistics?

1. Hours/days of training for each element ?
2. Training class/group size ?
3. WHO? Miners, *foreman*, technician / maintenance, others.
 - SPECIALIZED TRAINING?
4. HOW MANY? 30,000 ?
5. Training content/materials; training location?
6. State & Federal approval timing?

Training Planning: *Train Trainers?*

1. *What If:* 100+ trainers trained to give initial & after, refresher training
2. *What If:* Total new initial training =
2 days
 - 4 to 8 months to train 30,000 personnel?
 - Mine personnel availability?

Options to Address New Training Requirements

ADJUST CURRENT TRAINING PROGRAMS

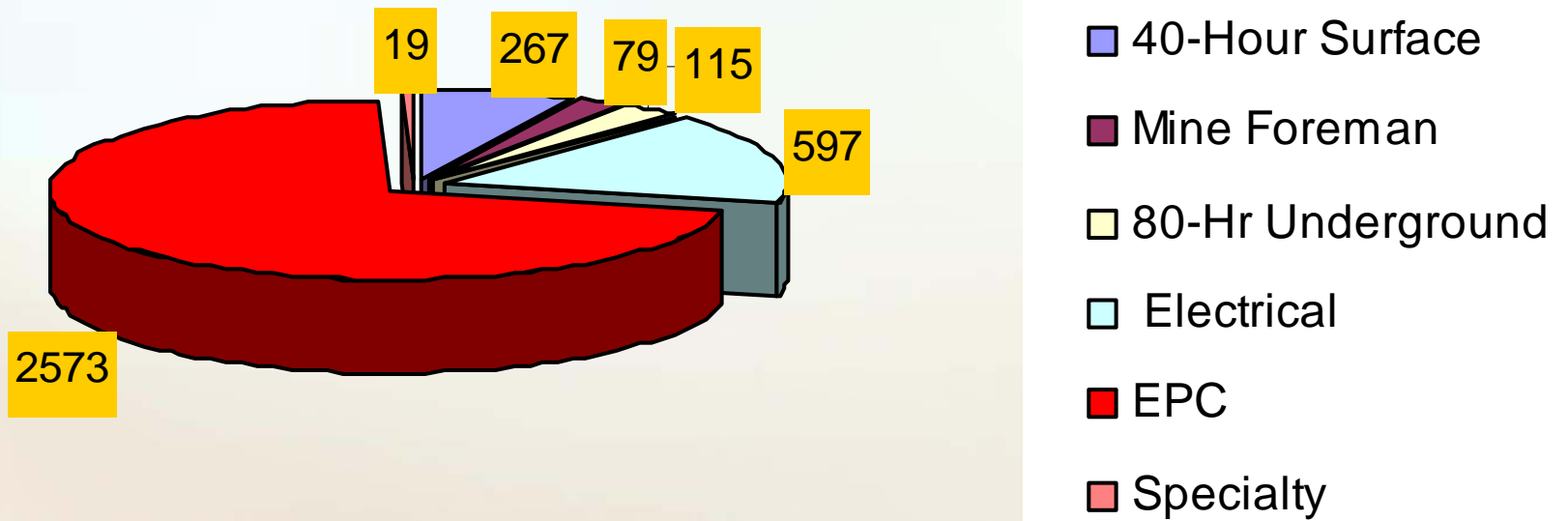
- Apprentice miner-Underground/Surface
 - Should they be exposed to more information?
 - Ventilation?
 - Mine maps?
 - Evacuation plans?
- Electrician certification
- Re-training
- Foreman/supervisory
- Fireboss

Ex: WV Miner Certifications 2005

January to September: WV Office of Miners' Health, Safety/ Training

Certification Type	Number Issued
Apprentice u/g Miner	3,566
Underground Miner	1,545
Underground Mine Foreman	167
Total (All types)	13,334

MES STUDENTS 2005



TOTAL STUDENTS: JANUARY-DECEMBER 2005- 3,650

Training Resources?

Capacity to modify and develop curriculum

- Academy for Mine Training and Energy Technologies
 - WVU Mining Extension Services
 - Southern WV Community and Technical College
- WV Office of Miners' Health, Safety/ Training
- Mine Health and Safety Administration / Academy
- University & Community College System in WV
- Industry Safety and Training Departments
- NIOSH