

United States Department of Labor
**Mine Safety and Health
Administration**



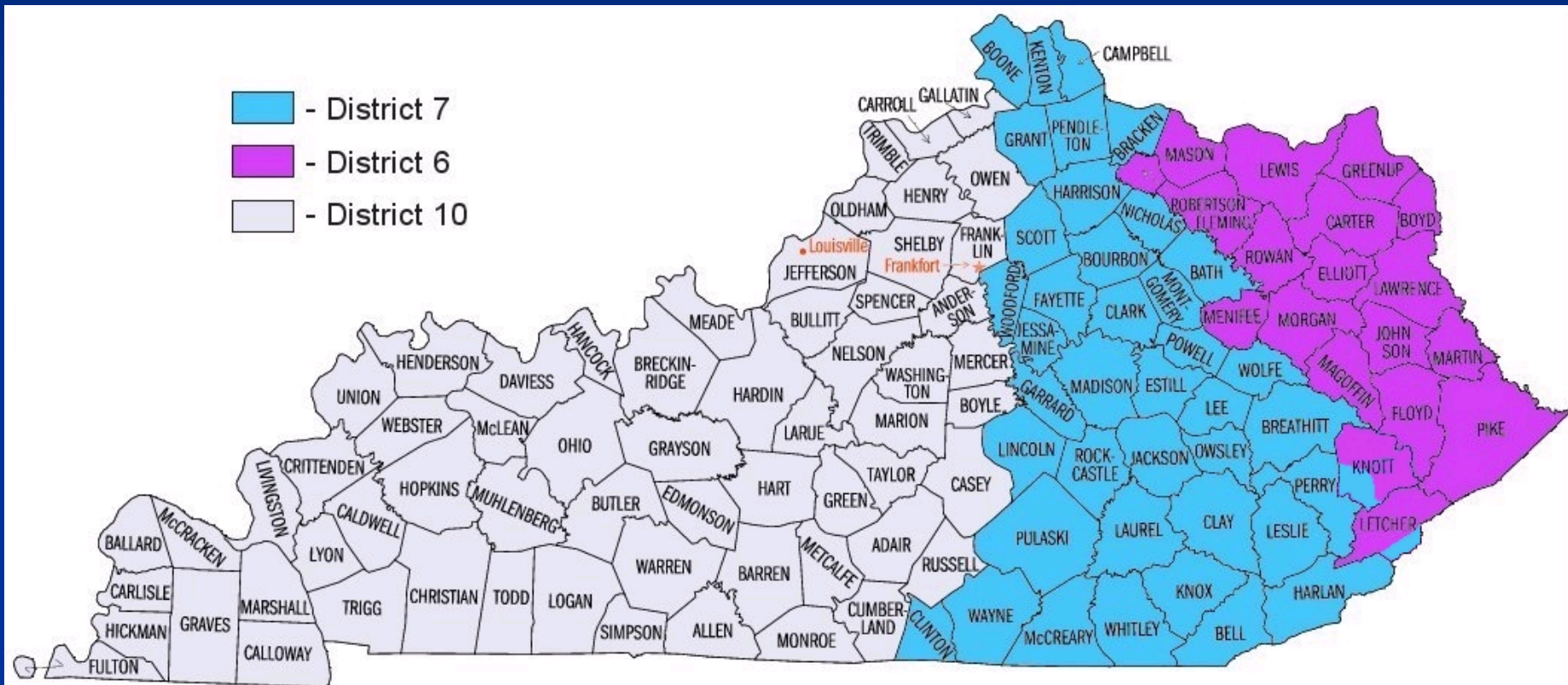
Dennis Cotton

Acting District Manager

District 7

Coal Mine Safety and Health

KY MSHA Districts



Kentucky

Total Number of Mines

	<i><u>D6</u></i>	<i><u>D7</u></i>	<i><u>D10</u></i>	<i><u>Total</u></i>
■ <i>Underground</i>	<i>52</i>	<i>51</i>	<i>14</i>	<i>117</i>
■ <i>Surface</i>	<i>102</i>	<i>81</i>	<i>14</i>	<i>197</i>
■ <i>Facilities</i>	<i>48</i>	<i>61</i>	<i>14</i>	<i>123</i>
■ <i>Total Operations</i>	<i>202</i>	<i>193</i>	<i>42</i>	<i>437</i>
■ <i>Producing Operations</i>	<i>148</i>	<i>118</i>	<i>30</i>	<i>296</i>
■ <i>Non-producing Operations</i>	<i>54</i>	<i>75</i>	<i>12</i>	<i>141</i>

Total Number of Miners in Kentucky - 11,323

Coal Fatalities Nationwide CY 2014

COAL DAILY FATALITY REPORT - September 4, 2014

FATALITIES CHARGEABLE TO THE COAL MINING INDUSTRY	2010		2011		2012		2013		2014	
	UG	S	UG	S	UG	S	UG	S	UG	S
ELECTRICAL	0	0	0	1	1	0	0	0	1	0
EXP VESSELS UNDER PRESSURE	0	0	0	0	1	0	0	1	0	0
EXP & BREAKING AGENTS	0	0	0	0	0	0	0	0	0	0
FALL/SLIDE MATERIAL	0	0	0	0	0	0	0	0	0	0
FALL OF FACE/RIB/HIGHWALL	3	0	2	0	1	0	1	0	2	0
FALL OF ROOF OR BACK	2	0	1	0	1	0	2	0	0	0
FIRE	0	0	0	0	0	0	0	0	0	0
HANDLING MATERIAL	0	0	0	0	1	0	0	0	0	0
HAND TOOLS	0	0	0	0	0	0	0	0	0	0
NONPOWERED HAULAGE	0	0	0	0	0	0	0	0	0	0
POWERED HAULAGE	3	3	2	2	1	1	4	0	1	1
HOISTING	0	0	0	0	0	0	1	0	0	0
IGNITION/EXPLOSION OF GAS/DUST	29	1	0	0	0	0	0	0	0	0
INUNDATION	0	0	0	0	0	0	0	0	0	0
MACHINERY	2	1	2	2	1	1	1	3	3	1
SLIP/FALL OF PERSON	0	0	0	1	1	2	0	0	0	0
STEP/KNEEL ON OBJECT	0	0	0	0	0	0	0	0	0	0
STRIKING OR BUMPING	0	0	0	0	0	0	0	0	0	0
OTHER	0	0	0	0	0	1	0	1	0	0
YEAR TO DATE TOTALS	39	5	7	6	8	5	9	5	7	2
COMBINED YEAR TO DATE TOTALS	44		13		13		14		9	
END OF YEAR TOTAL	48		21		20		20			

Coal Fatalities Nationwide CY 2014

Location of Accidents

9 Fatal Accidents

- 7 Underground
- 2 Surface

Coal Fatalities Nationwide CY 2014 Accident Classification

9 Fatal Accidents

- 4 Machinery
- 2 Fall of Face/Rib/Highwall
- 2 Powered Haulage
- 1 Electrical

Coal Fatalities Nationwide

CY 2014

By State

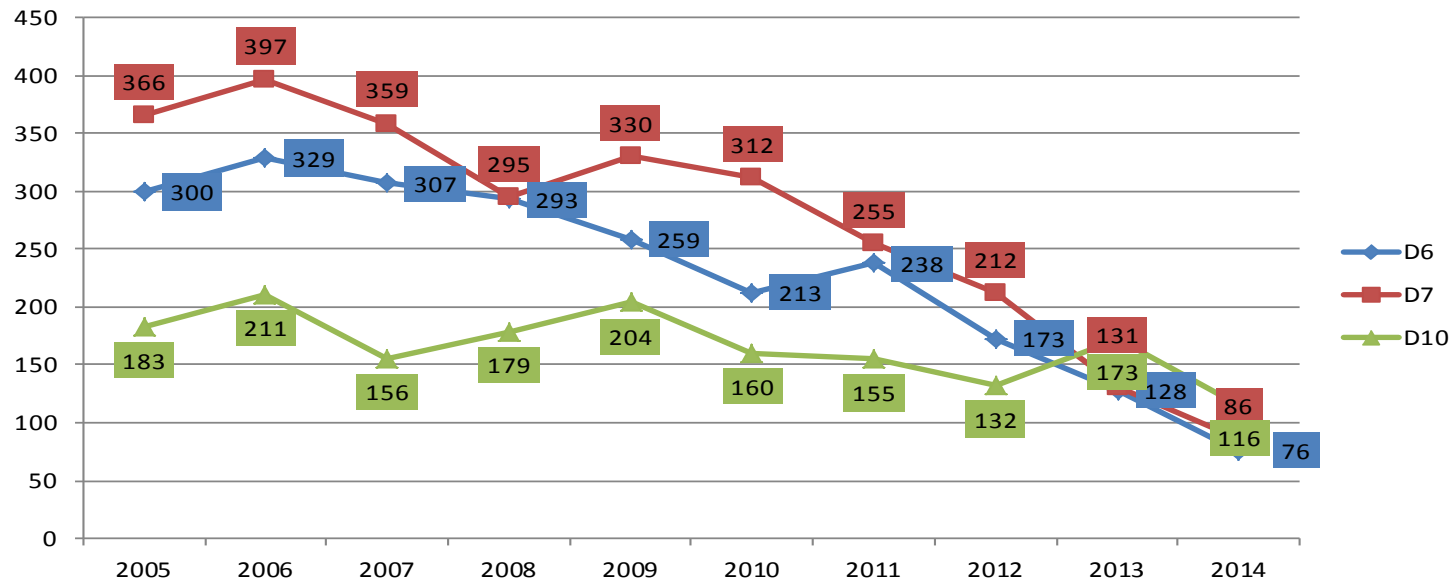
9 Fatal Accidents

- 3 WV
- 2 VA
- 1 WY
- 1 IN
- 1 MT
- 1 IL

Kentucky Accidents 2005 – 2014

Kentucky Accidents (Degree of Injury 2 - 5)

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
D6	300	329	307	293	259	213	238	173	128	76
D7	366	397	359	295	330	312	255	212	131	86
D10	183	211	156	179	204	160	155	132	173	116
Totals	849	937	822	767	793	685	648	517	432	278



Kentucky Fatalities

	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014
D6	3	6	2	1	3	0	2	2	0	0
D7	5	9	0	5	3	4	4	2	2	0
D10	0	1	0	2	1	3	2	1	0	0
Totals	8	16	2	8	7	7	8	5	2	0

Coal Fatalities CY 2014

■ Coal Fatality #1 – January 16, 2014

Mettiki Coal WV, LLC
Mountain View Mine
Powered Haulage



On Friday, January 16, 2014, a 20-year-old general inside laborer with 2 years of mining experience was killed when he was struck by a feeder. The victim was standing between the coal rib and the feeder when the securing post dislodged, allowing the tailpiece unit to shift and pin him between the rib and the frame of the feeder. The victim had just finished connecting a chain between the feeder and the tailpiece when the accident occurred.

Coal Fatalities CY 2014

■ Coal Fatality #2 – February 21, 2014

Sun Coke Energy
Dominion #30
Machinery



On Friday, February 21, 2014, a 24-year-old continuous mining machine operator with 5½ years of mining experience was killed when he was pinned between the end of the boom of a continuous mining machine and the right coal rib. The miner was tramming the remote controlled continuous mining machine in the last open crosscut toward the Number 1 entry.

Coal Fatalities CY 2014

■ Coal Fatality #3 – March 25, 2014

Gibson County Coal, LLC
Gibson Mine
Machinery



On Tuesday, March 25, 2014, at approximately 1:45 a.m., a 41-year-old mechanic trainee with 23 weeks of mining experience was killed while working on a belt feeder. The victim was cutting through the inner left side plate of the crawler assembly that connects the hopper jack assemblies to the crawler frame. When the cut was completed, the crawler assembly pivoted upward, pinning the victim between the crawler track and the frame of the feeder.

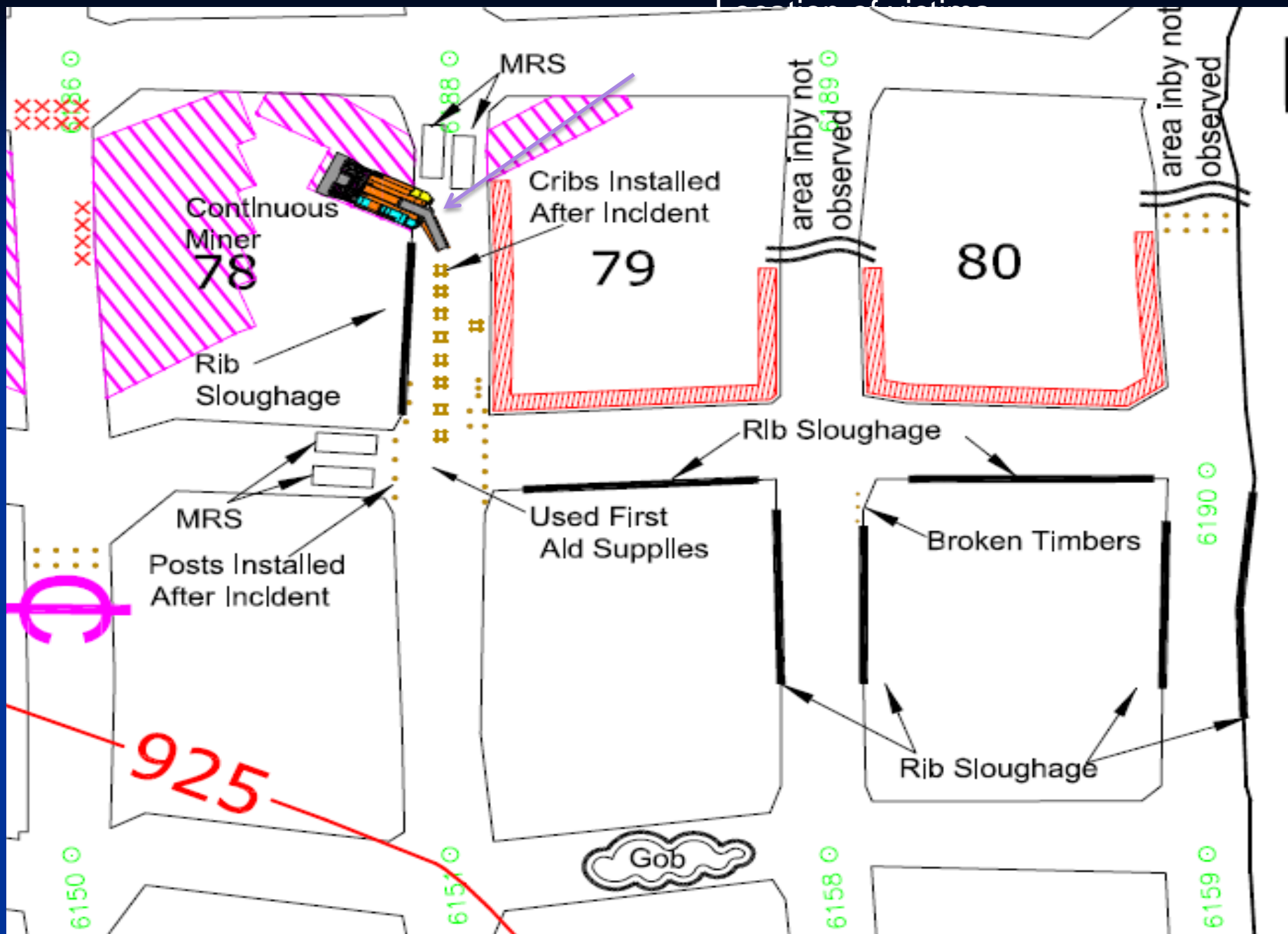
Coal Fatalities CY 2014

■ Coal Fatality #4 and #5 – May 12, 2014

Brody Mining, LLC
Brody Mine No. 1
Fall of Face/Rib/Highwall



On Monday, May 12, 2014, a 48-year-old continuous mining machine operator with 26 years of mining experience, and a 46-year-old mobile roof support operator/roof bolter with 3½ years of mining experience, were fatally injured as a result of a coal rib burst. The section crew was retreat mining in the #6 entry of the 4 East Mains Panel. They were mining the second lift of the left pillar block when the accident occurred.



Coal Fatalities CY 2014

■ Coal Fatality #6 – May 14, 2014

M Class Mining
MC #1 Mine
Machinery



On Wednesday, May 14, 2014, a 25-year-old roof bolter operator with 1 year and 44 weeks mining experience was killed when he was pinned between a roof-bolting machine and the coal rib. The victim and another roof bolter operator were in the process of tramming the roof-bolting machine in the outby direction in the No. 3 entry on the No. 1 Longwall Tailgate. They had trammed the roof bolting machine from the 151 crosscut to approximately the 89 ½ crosscut when the accident occurred. The victim was found on the left side of the roof-bolting machine between the machine and the coal rib.

Coal Fatalities CY 2014

■ Coal Fatality #7 – June 4, 2014

Peabody Powder River Mining, LLC
North Antelope Rochelle Mine
Machinery



On Wednesday, June 4, 2014, a 25-year-old contract equipment operator with 24 weeks of experience was killed when he was crushed between the hood and frame of an impact crusher. The victim had just finished clearing a large rock from the crusher area when the accident occurred.

Coal Fatalities CY 2014

■ Coal Fatality #8 – June 23, 2014

Cloud Peak Energy
Spring Creek Mine
Powered Haulage



On Monday, June 23, 2014, at approximately 7:35 p.m., a 58-year-old truck driver, with 5 years of mining experience, was killed when the haul truck he was operating traveled through a berm and descended approximately 75 feet into a spoil “V.”

Coal Fatalities CY 2014

■ Coal Fatality #9 – August 20, 2014

CONSOL Buchanan Mining
Company, LLC
Buchanan Mine #1
Electrical



On Wednesday, August 20, 2014, a 41-year-old maintenance supervisor with approximately 19 years of mining experience was killed when he came in contact with an energized component inside an explosion proof enclosure. The victim had removed the enclosure's panel cover and was troubleshooting or performing electrical work on the 600 VAC roof bolting machine when he was electrocuted.



2014 Preventive Roof/Rib Outreach Program

Points to Remember

Improvements in roof control technology have led to a significant reduction in roof fall accidents and fatalities. Despite these gains, roof and rib falls continue to be a leading cause of accidents and injuries in underground coal mines. In 2013, 265 miners were injured from roof and rib falls. Nearly half of the accidents (124) occurred during the four-month period of June through September. Roof fall injury rates are highest in the summer months due to the deterioration of roof rock resulting from higher humidity in the air.

Ways to lessen the hazard include:

- Be aware that the roof fall and injury rates are highest in the summer months.
- Focus examinations during summer months to detect roof that has weathered because of humid air.
- Communicate with the foreman and other miners when adverse roof/rib conditions are observed.
- Follow the approved roof control plan. The roof control plan contains the minimum support system for controlling the roof; and changing conditions may require installation of supplemental support.

- Use proper skin control, such as straps, pizza pans or screen wire mesh, where loose roof or ribs may be encountered.
- Scale loose roof and ribs in the face and outby travelways.
- Be aware and recognize that rocks composed of clay and other moisture sensitive materials are prone to weathering when exposed to humid air.
- When the roof is composed of rocks that are prone to weathering use more surface control coverage during installation of roof support.
- Just because your mine's roof didn't have moisture related problems in the past doesn't mean you're in the clear—some roof problems only appear after repeated cycles of wetting and drying.
- Keep your mind on the task being performed – avoid distractions.

Ways mine management can lessen the hazard include:

- Make available the proper equipment and support materials for correcting adverse roof/rib conditions.
- When possible, maintain a mining horizon that results in an immediate roof consisting of material (coal or rock) that is nonreactive to moisture.
- Monitor roof fall accidents and injuries to evaluate the adequacy of the roof control plan.
- Make revisions to the roof control plan when conditions indicate the plan is not adequate for supporting the roof and ribs.

MANAGEMENT TO ENSURE PLAN IMPLEMENTATION



CREW (RE)TRAINING PRIOR TO RETREAT MINING

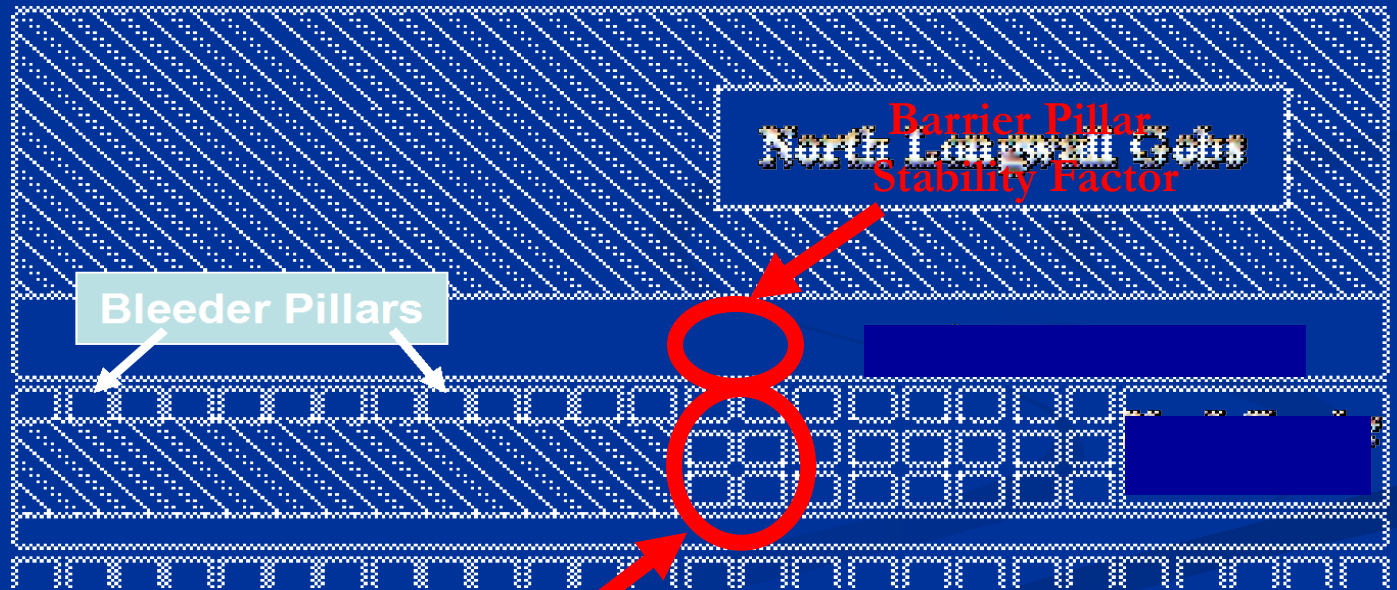


- Roof Control Plan
- Hazard Identification
- Cut Sequence
- Personnel location during mining (red zones)





PILLAR DESIGN



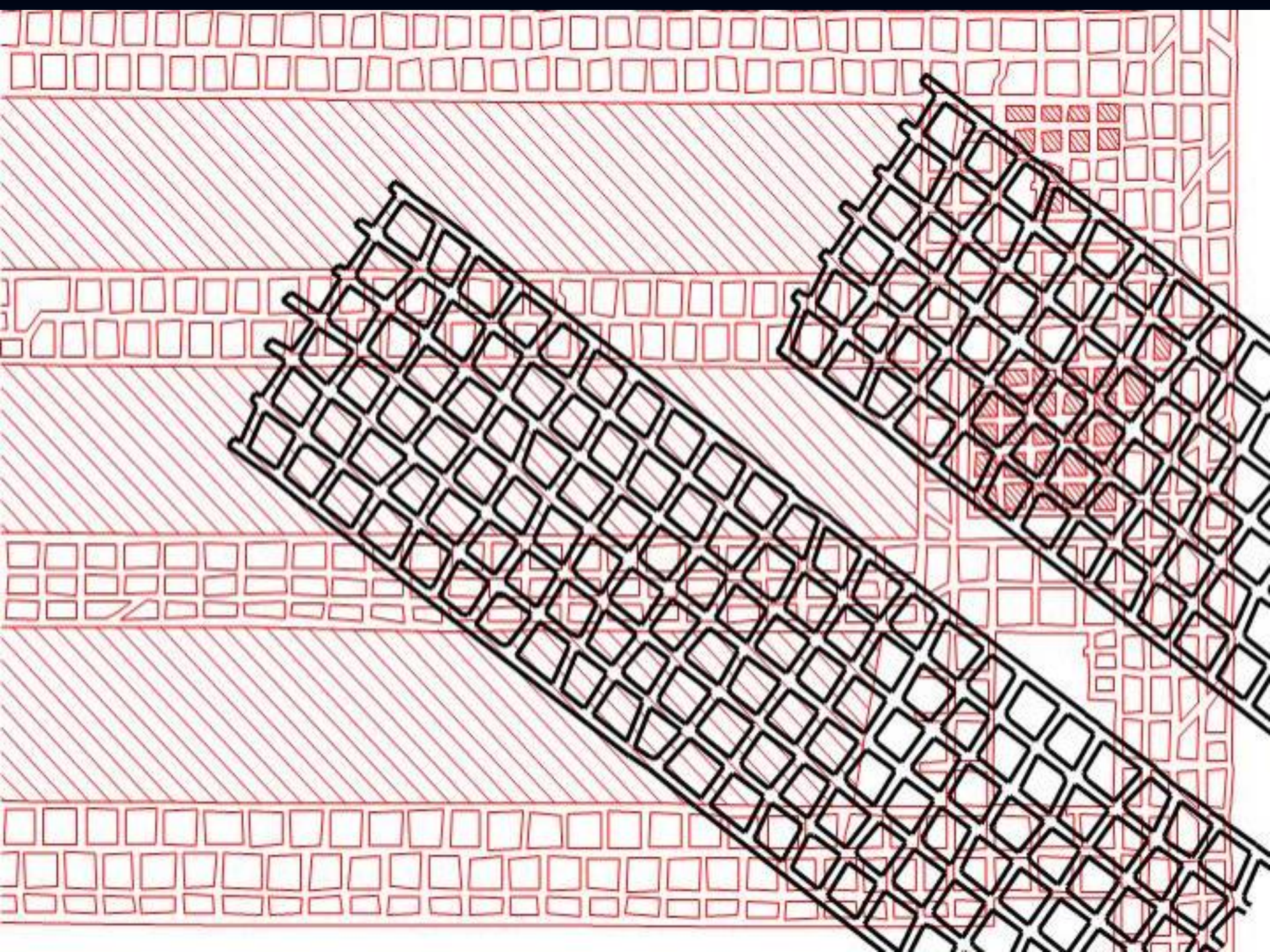
ARMPS SF
(Production Pillars)

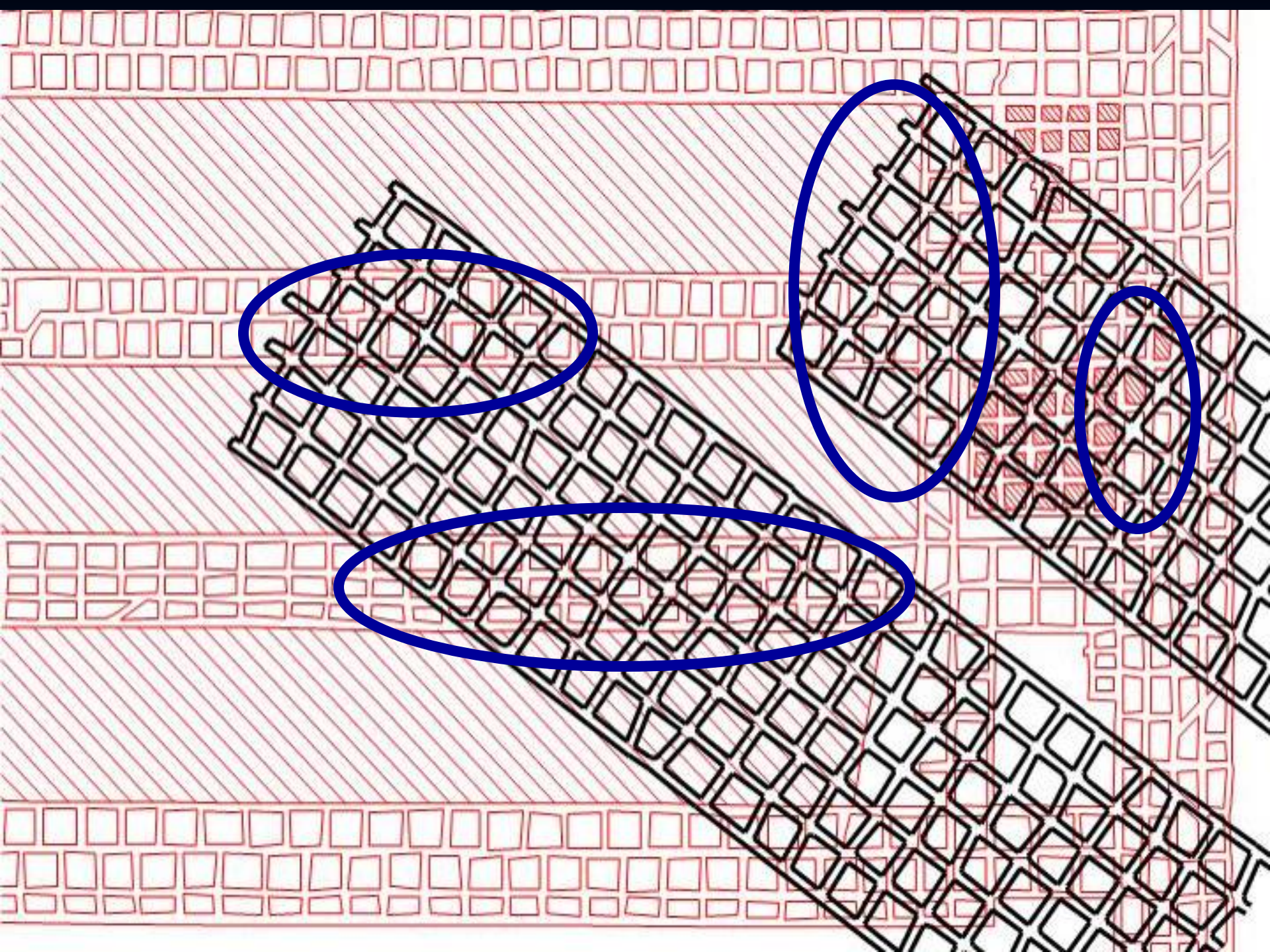
Analysis of Retreat Mining Pillar Stability (ARMPS): Version 6 (2010)



MULTIPLE SEAM MINING







Division of Safety Update

Mining Under Deep Cover

During the past two years, three serious coal bursts have occurred at deep cover retreat mines. The events at Panther No. 1, Huff Creek No. 1, and Brody Mine No. 1 have resulted in three fatalities and two permanently disabling injuries. In all three cases the pillars were properly sized and met all the NIOSH pillar stability factor criteria. In addition, none of these three mines had ever reported a burst before.

Division of Safety Update

Mining Under Deep Cover

MSHA identified five areas to address:

1. Re-evaluations needed of any plans currently approved.
2. Application of improvements identified in retreat accidents, (Huff Creek and Panther mines) where applicable;
3. Plan requirements for any early warning outbursts / bumps reported to MSHA by mine operators with roof control plan changes as part of mining plans;
4. Requirements for mine operators to conduct risk assessments as recommended in the NIOSH recommendations following the congressional review of Crandall canyon disaster;
5. Changes in the computer modeling used for deep cover retreat mines where multiple mined out seams overlay the seam to be mined.

Division of Safety Update

Mining Under Deep Cover

Response

An Action Plan was developed to meet these objectives. The Action Plan identified three key tasks:

1. To evaluate current deep cover retreat mining operations for bump potential, and require changes to roof control plans as appropriate to minimize the bump risk.
2. To incorporate requirements for early warning outbursts/ bumps into roof control plans, including crew training in warning to signs to look for, monitoring to be conducted, and reporting requirements.
3. To require operators of deep cover retreat mines to conduct burst risk assessments prior to mining.

Division of Safety Update

Mining Under Deep Cover

Status Update

1. Active retreat mining under deep cover was identified. Enhanced reviews (burst risk assessments) were conducted at the identified mines and plan changes were required in about a half-dozen cases. The changes were typically relatively minor and did not require that any mine be shut down. Currently, Tech Support is continuing to conduct such reviews for mines that will be conducting deep cover retreat mining during the next 6 months or so.
2. Language was developed to be included in roof control plans that addresses training, monitoring, and reporting of coal bursts. This language should be included in any mine's plan that conducts development or retreat mining in deep cover areas.
3. A Program Information Bulletin (PIB) has been prepared that provides guidance to mine operators about how to conduct a coal burst risk assessment. The PIB is currently being reviewed.

Division of Safety Update

Mining Under Deep Cover

- Nationwide, 45 mines were identified to meet the criteria of having potential to retreat mine under at least 1000 feet of cover.
- 23 of the deep cover retreat mines are located in District 7.
- District 7 sent each of these mines sample wording regarding “Retreat Mining Zones” as well as training, monitoring and reporting of coal bursts. This wording was intended as a starting point for the type of wording to be included in Roof Control Plans.

RETREAT MINING ZONES

GREEN ZONE	YELLOW ZONE	ORANGE ZONE
< 1000' of Cover OR Overlying Gob with No Remnant Structure OR Underlying Gob with No Remnant Structure OR Weak Roof/Floor	> 1000' of Cover	> 1400' of Cover with (Strong-Hard) Roof that is > 5 Feet in Thickness and Within 4.25' of the Coal Seam > 1000' of Cover at Close Proximity Remnant or Gob-Solid Boundaries Including Over/Under Gob Side Bleeder Pillars and Outby the Pillar Line for a Distance of Five Times the Square Root of the Overburden Severe Seam Rolls with > 1400' of Cover and Strong-Hard Roof
TRAINING	TRAINING	TRAINING
	Recognizing Bump Indicators	Recognizing Bump Indicators
	Utilizing "A-Cuts"	Utilizing "A-Cuts"
	No Closing in the Middle Entry	Begin Cut Sequence at Inby End of Pillar and Work Sytematically Outby
	Leave Pillar Blocks When Necessary	Narrow Pillar Lifts (Half the Miner Head)
	Administrative Controls	Closing in the Outside Entries
	Physicals Barriers (Item 2 in additional info)	Leave Pillar Blocks When Necessary
		Administrative Controls
		Physicals Barriers (Items 1 & 2 in additional info)

BUMP INDICATORS: Red dust and/or red slickensides at the coal and roof/floor interface, significant rib spalling or floor heave, increase in the number or intensity of small, non-reportable bursts.

"A-CUTS": A diligent effort will be made to utilize "A-Cuts" in Yellow & Orange Zones to mitigate stored energy in coal pillars. "A-Cuts" are the first most inby lift(s) mining in a pillar.

NARROW PILLAR LIFTS: Lifts less than the cutter head width will be utilized to the extent possible in Orange Zone areas.

STRONG-HARD ROOF: Will be defined by corehole/testhole data and adjusted during development of each area (i.e., strata that does not collapse or break up during mining or is not easily mined for equipment clearance).

SEVERE SEAM ROLLS: Will be defined by floor elevations during development of each area where the change in floor elevation is > 15% grade in a 20' linear distance.

Respirable Dust Rule Implementation



THE TOLL OF BLACK LUNG CONTINUES



Chester Fike

Born Feb. 3, 1952

Died Dec. 18, 2012

A victim of black lung,
Chester died four months
after undergoing a
double lung transplant.

It is time to end this preventable disease

76,000

deaths since
1968

\$45 billion

spent in federal
compensation

New cases

being diagnosed,
including in young miners

A new rule issued by the U.S. Department of Labor's Mine Safety and Health Administration will greatly improve the protection of America's coal miners from this debilitating disease. The rule is the centerpiece of MSHA's initiative to End Black Lung – Act Now! To learn more, visit www.msha.gov/endblacklung.



MINE SAFETY AND HEALTH ADMINISTRATION
UNITED STATES DEPARTMENT OF LABOR

Major Changes to Respirable Dust Sampling Program

■ Immediate Changes

- Sample portal to portal for full shift regardless of shift length
- Control filter required for CMDPSU samples
- Establish Excessive Concentration Values (ECV)
- Certified sampler that made on-shift checks must sign dust data card
- Part 90 includes surface miners

Major Changes to Respirable Dust Sampling Program

- Immediate Changes
 - Medical monitoring applies to surface and underground miners
 - Noncompliance on MSHA samples will be based on a single full shift measurement
 - Shifts longer than 12 hours, certified sampler will switch CMDPSU with a fully charged pump prior to the 13th hour

Major Changes to Respirable Dust Sampling Program

■ Immediate Changes

- Mine ventilation plan content:
 - Minimum quantity of air for each MMU
 - Specific details of dust control for each MMU
 - Specific type, size and maintenance of scrubber screen
 - Maintenance of dust collectors
- 75.362(a)(2) exams are recorded in a secure book or electronically, verified by certified person, and countersigned by Mine Foreman

Major Changes to Respirable Dust Sampling Program

- Immediate Changes
 - Operators required to record shift length for each production shift on each MMU
 - Noncompliance based on 2 of 5 samples meeting or exceeding the ECV
 - Operators required to record production for each shift on each MMU
 - Required air measurements at the end of the line curtain with the scrubber turned off

Major Changes to Respirable Dust Sampling Program

- Immediate Changes
 - Begin sampling DWPs and Part 90 miners on a quarterly basis
 - Production on shift sampled is 80% of last 30 production shifts
 - Establish $0.1\text{mg}/\text{m}^3$ ($100\ \mu\text{g}/\text{m}^3$) quartz standard
 - DWPs include highwall drill and bulldozer operators

Major Changes to Respirable Dust Sampling Program

- After 18 Months
 - CPDM sampling for DOs and Part 90
 - Establish ODOs on MMUs
 - Sample at least 15 consecutive normal production shifts for DOs and ODOs
 - Noncompliance on operator collected samples will be based on 3 of 15 required samples meeting or exceeding the ECV

Major Changes to Respirable Dust Sampling Program

- After 18 Months
 - The District Manager may require additional sets of 15 samples on DOs if he believes the ventilation plan is not being followed
 - Shifts longer than 12 hours, certified sampler will switch CPDM with a fully charged unit prior to the 13th hour

Major Changes to Respirable Dust Sampling Program

- After 24 Months
 - The dust standard is reduced to $1.5\text{mg}/\text{m}^3$
($0.5\text{mg}/\text{m}^3$ on intake air and Part 90 miners)



SAFETY ALERT

PVC/CPVC Piping Through Seals and Anti-freeze in Water Traps

An explosion occurred within a sealed area of an underground coal mine on June 30, 2012. The 120-psi seals exhibited no apparent signs of structural damage. However, the forces from the explosion severely damaged 3 of the 4 PVC water drainage pipes installed through the lowest seal in the set. Testing and independent evaluations led to the conclusion that the Schedule 80 PVC pipes failed due to a rapid internal over-pressurization. The only pipe remaining intact did so because the water trap assembly was not secured to the pipe. Pressure relief was provided when the forces dislodged the trap from the end of the pipe.

Pleasant Hill Mine

- Water Drainage Systems were Damaged



Pleasant Hill Mine



Division of Safety Update

PVC Pipe in Seals

- Plans for 120 psi seals with PVC water traps can be denied based on Pleasant Hill explosion and preamble language
 - 3 schedule 80 pipes destroyed
 - 1 remained intact (trap not secure, provided pressure relief)
 - Preamble (April 18, 2008, p. 21201, 75.337(h)):
“...drainage pipes must have strength properties consistent with the design strength of the seal, and the drainage system must have blast resistance equivalent to that of the seal.”
- PVC pipe was not consistent with the preamble language

Division of Safety Update

PVC Pipe in Seals

- Can use other non-conductive pipe (e.g., (HDPE) High-Density Polyethylene) or means for relieving pressure
 - Strength of the pipe must be consistent with that of the seal
- Designs submitted to DM to be sent to TS
- Designs incorporated into Vent Plan
- Vent Plan revisions based on same reasons for retrofitting or protecting current PVC traps in 120 psi seals
- Vent Plan route should get quicker results and innovations
- Anti-freeze in retrofitted/protected PVC traps – should also include provisions for exams for degradation; may include a replacement schedule
- Material other than PVC could be used for traps

Division of Safety Update

Impoundment Upstream Construction

- Upstream construction is (ideally) the placement of coarse coal refuse over an exposed delta of fine coal refuse. Where exposed deltas do not exist, coarse refuse may be pushed into the water until a work surface is formed.
- Over the years, relatively minor failures of impoundment upstream pushouts have occurred.
- The November 2012 Nolan Run fatality occurred on a saddle dam using the upstream construction method. In this case, coarse refuse was pushed into water and on top of very fine slurry.
- MSHA realized that additional analyses are needed in design plans to confirm stability of stages involving upstream construction, especially when exposed deltas do not exist.

Division of Safety Update

Impoundment Upstream Construction

- Water is present in the pore spaces of coarse and fine coal refuse.
- Designers rely on the water being squeezed out of the fine refuse as the embankment is constructed. This increases the strength of fines in the foundation.
- Sometimes the slurry is so fine it doesn't drain or embankment construction loads the material quicker than it can drain.

Division of Safety Update

Impoundment Upstream Construction

- The trapped water becomes pressurized resulting in elevated pore pressures, which reduces the strength of the slurry.
- Technical Support's Mine Waste and Geotechnical Engineering Division evaluated the conditions and has drafted design requirements and internal procedures for reviewing upstream construction stages. The draft document is still under review.
- This topic was presented at the 2014 Dam Safety Training for Coal.

Division of Safety Update

Impoundment Upstream Construction

- A Coal and TS committee will meet to discuss the best way to disseminate the new information to MSHA districts and industry.
- Possible actions are an addendum to the coal impoundment design manual along with updates to the inspection and plan review handbook.

Division of Safety Update

Refuge Alternatives

Signal Peak - Bull Mountain Mine (D9)	Signal Peak replacing 15 PSI with Kennedy RA, District to confirm
San Juan - 15 PSI (D9)	Approximately 2 weeks away from approval, 2 citations extended
Desarado - 15 PSI (D9)	Tech Support waiting on additional information for approval, citations due 8/4/2014, 4 citations on Kennedy RAs - OK
Carbonok (D7)	Retro-fits estimated to be completed by end of September 2014 possibly into October, delay are cylinders, valves, fittings and hardware for both the oxygen delivery and the harmful gas removal systems.
Strata	Received MSHA approvals for BA, HGR, & AM, Revised zipper video and user manuals sent to NIOSH for review, Retro-fits on hold, waiting on confirmation from NIOSH might be a while
Kennedy RA - Retro-fits (D8 & D9)	New 4500 PSI cylinders, plumbing, etc. Cylinders will take 5 weeks for delivery about August 1 st . They can retrofit them at the rate of one every two weeks. So all four done about October 1. More likely November 1st due to the cylinder question. Approval plates, fire extinguishers, fire blankets and manuals shipped to distributors to be installed at mines.

Division of Safety Update

Refuge Alternatives – MineShield

MODEL	Extension #	Status
CF204 (6 person)	01	Approved
CF227B (16 person)	02	Approved
CF207F (16 person)	03	Approved
CF211F (16 person)	04	Approved
CF209 (8 person)	05	Approved
CF220 (25 person)	06	Approved
CF226 (12 person)	07	Approved
CF206 (8 person)	08	Approved
CF210 (8 person)	09	Approved
CF201 (12 person)	10	Approved (The approval letters were just signed today)
CF208 (14 person)	11	Review Complete – Submitted for indexing
CF227 (20 person)	12	Review Complete – Ready for indexing
CF208B (16 person)	13	Beginning the review
CF207 (9 person)	14	Submitted – Not being reviewed yet
CF224 (18 person)	15	Submitted – Not being reviewed yet
CF228 (14 person)	16	Submitted – Not being reviewed yet
CF211 (10 person)	17	Submitted – Not being reviewed yet
CF216 (8 person)	18	Submitted – Not being reviewed yet
CF217 (12 person)	19	Submitted – Not being reviewed yet

Division of Safety Update

RFI-EMI Interference – CO Systems

- In 2009 RFI saturation created false readings on Pyott-Boone CO sensors
- Pyott-Boone published a letter documenting the problem
- Radio frequency being transmitted in close proximity of a CO sensor will cause an instant spike in the CO value.
- The false detection is not limited to Pyott-Boone CO monitors
- Hazard Alert is being drafted to inform mine operators of the issue and to contact MSHA when upgrades are made to the CO System PPL P14-V-01 addresses “.... blasting circuits and other electrical systems”

Division of Safety Update

RFI-EMI Interference – CO Systems

- Once informed by the mine operators the districts should;
 - Contact Technical Support
 - Update respective plans Vent or ERP (guidance will be sent to Districts) to include steps taken by the operator to mitigate the problem. These techniques may include:
 - Maintaining manufacturer recommendations on separation distances
 - Using lower power levels on portable radios
 - Researching vulnerabilities during the purchasing process
 - Purchasing equipment that does not operate in the same frequency range of equipment presently used at the mine
 - Install updates as provided by the manufacturer that are immune to RFI and EMI

Division of Safety Update

Exam Rule

- 75.363(e) – Mine Examiners meet with mine operator on quarterly basis
- Adjustments to District Plans as needed
- Website tools
 - 9 standards
 - Rules to live By



Pattern of Violations Single Source Page



UNITED STATES
DEPARTMENT OF LABOR

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Mine Safety and Health Administration

MSHA - Protecting Miners' Safety and Health Since 1978

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Pattern of Violations Single Source Page

A mine operator that has a potential pattern of recurrent S&S violations at a mine will receive written notification from MSHA. An S&S violation is one that could reasonably be expected to lead to a serious injury or illness. The operator will have an opportunity to review and comment on the documents upon which the potential pattern of violations is based, and develop a corrective action program to reduce S&S violations. MSHA will closely monitor the affected mine's compliance. If the operator significantly reduces its S&S violation rate, it can avoid being issued a Notice of a Pattern of Violations pursuant to Section 104(e) of the Federal Mine Safety and Health Act of 1977. If the improvement falls short of prescribed goals, MSHA will issue the notice. For each S&S violation subsequently found, MSHA will issue an order withdrawing miners from the affected area until the cited condition has been corrected. An operator can be removed from a pattern of violations when 1) an inspection of the entire mine is completed and no S&S violations are found or 2) no withdrawal order is issued by MSHA in accordance with Section 104(e)(1) of the Mine Act within 90 days of the issuance of the pattern notice.

Resources

- ***Monthly Monitoring Tool for Pattern of Violations***

Enter an MSHA Mine ID : (7 Digits - No Dash)

If you do not know the Mine ID, please use the [Data Retrieval System](#).

- [Pattern of Violations Screening Criteria - 2010](#)
(Revised 11/5/2010 to Include National Mine Type Severity Measures)
- [Pattern of Violations \(POV\) Procedures Summary - 2010](#)
- [30 CFR Part 104 - Pattern Of Violations](#)
- [FedReg 2011-2255](#) - Pattern of Violations; Proposed rule; notice of close of comment period.
- [FedReg 2011-7975](#) - Pattern of Violations; Proposed rule; extension of comment period.
- [FedReg 2011-10788](#) - Pattern of Violations; Proposed rule; notice of public hearings; notice of re-opening and close of comment period.
- [FedReg 2011-15250](#) - Pattern of Violations; Proposed rule; notice of public hearing; notice of extension of comment period.

QUESTIONS???