Overview of Safety in the NSW Coal Industry 2011-12

Check Inspectors Safety Seminar
5 September 2012

NSW Trade and Investment, Investigation Unit
Incidents reported to NSW Mine Safety

- 12 month period between
  1 April 2011 to 31 March 2012

U/G  2,041
O/C  574

2,615 incidents reported

28 Serious bodily injuries
1 fatal incident UG coal  (3 June 2011)
The incident triangle for 2011/12

1 fatal incident

28 serious bodily injuries

2,615 reported incidents

?? unreported near misses
Serious bodily injuries

- 24 fractures
- 3 amputations
- 1 fracture of vertebral column

Outcomes of injuries
- 84 hospital in patients
- 433 injuries of greater than 7 days lost time
What are the reported issues

- Collision on surface 100 O/C 32 UG
  Mobile plant >2 tonne

- Unintended activation of 151 O/C 211 UG
  machinery no threat to life or injury
People and machines

If you saw this scenario

What is acceptable?

Machine isolated?

Load restraint?

Persons in bucket?
People and machines

2 persons in the bucket

Now what is acceptable, with persons still in the bucket?

What if the bucket was then suspended over a mine shaft?

Safety Alerts
SA 11-02
SA 11-07
SA 11-10
SA 11-13
SA 12-03
Gas and a means to ignite gas

- Gas trips
  
  616 UG

- In-service failure of explosion protected equipment
  
  377 UG

Gas and source of ignition can be a lethal combination
Gas and sources of ignition

Pike River Mine NZ
19 November 2010
2 walked out
29 fatalities

South Blakefield Mine NSW
5 January 2011
Approx 50 underground
No fatalities

Safety Alerts
SA 11-05
SA 11-06
SA 11-12
Contact with Energy

- Electrical energy contact 13 O/C 8 UG
- Escape of fluid/pressure 3 O/C 190 UG that could place a person at risk

HIGH Potential for a fatal outcome
Contact with energy

How do you consider energy risks?

Do you treat these items differently:

- 11kv cable
- 1,000v miner cable
- 305 bar (4,400 psi) Hydraulic hose
Contact with energy

Hydraulic hoses 305 bar (4,400 psi)

What would you consider necessary before removing a staple with a shifter?

Safety Alerts
SA 06-16
SA 11-04 ARC flash
Cultural Issues

- Production pressures
- Silo effect – responsibility across different departments
- Risk blindness – aware of risk but accepts the risk
- Poor reporting – no JSA or SWP
- Supervision – complacency
- Leadership – no task observations, no auditing, no monitoring
Some things to think about

- Do you review your mine incident reports and look for patterns of injuries.
- Can you become safety blind, by being too close to the action.
- Can getting the job done quickly affect the safety culture.
- Is the main aim of filling out the 5 x 5 matrix paperwork to get from red to green without taking time to properly understanding the task risks
- Are the risks being properly considered by the team and controlled
- Are job steps properly communicated to the person doing the job by the person writing the JSA or SWP
- Is the JSA written by a team of one