



Industry &  
Investment

# MINE SAFETY

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# INVESTIGATION UNIT

Serious crush injury to lower leg  
surface of underground coal mine  
21 August 2008

# Crushed by longwall service sleds

- 21 August 2008
- Incident on the surface of an underground coal mine in Hunter Valley
- Coupling together longwall service sleds
- Man-machine interaction required



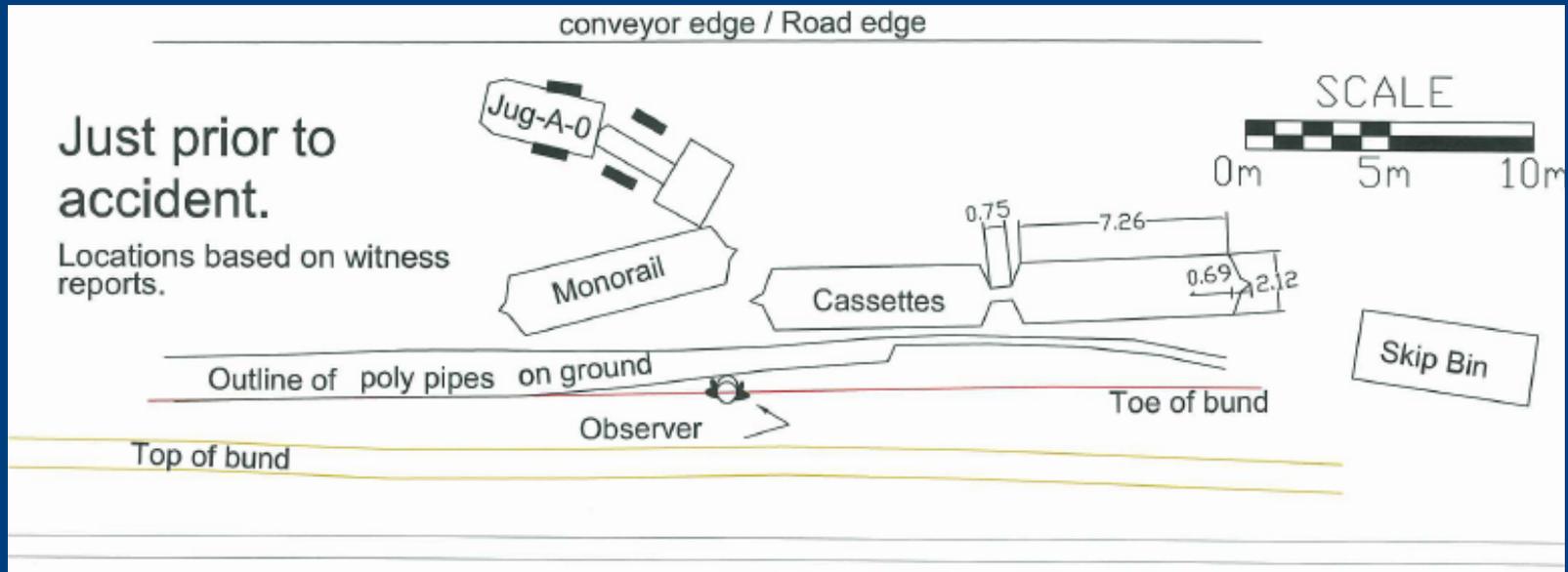
# The incident

- One cassette stationary, other being pushed into place by Juganaut to allow coupling together
- Person lent down to pickup the coupling as they appeared to be aligning perfectly
- As he did so, placed right foot on the ground near the stationary coupling





# The incident



- As the other sled was pushed closer it swung toward and past the joining point

# The injuries

- Lower right leg crushed between the two couplings resulting in compound fractures
- Flown by helicopter to hospital where mineworker underwent a series of operations that day to clean the wound and attend fractures
- Further plastic surgery required to repair leg wounds, including skin grafts
- Unlikely to be able to return to working underground

# Causal factors

- Coupling devices require manual handling
- Risk of injury not recognised
- Supervision did not include adequate instruction on how to couple longwall service cassettes and potential dangers
- Inappropriate controls to prevent persons from entering risk zone
- No available safe work procedure

# Best practice

## Minimal man-machine interaction:

- Identify risk
- Automatic coupling devices
- Appropriate safe work procedures that include machinery 'no go' zones.

# Related published resources

- I&I NSW Safety Bulletin SB08-08

<http://www.dpi.nsw.gov.au/minerals/safety/safety-bulletins/safety-bulletins-2008>