



This **SAFETY ALERT** has been prepared to provide all coal mines with the earliest possible advice of a windblast at a mine so that appropriate action can be undertaken at each mine to avoid any occurrence of a similar nature.

SUBJECT: WINDBLAST ASSOCIATED WITH THE FORMATION OF A NEW GOAF AT SHALLOW COVER.

BACKGROUND:

At the time of the incident a new goaf, surrounded by solid cover was being established in a 2.7m seam at 45m depth of cover. Due to anticipated poor roof zones more stooks were being left than would normally be expected.

Under normal circumstances 3 rows of pillars are required to establish a goaf, however in this area 4 rows had been extracted with no fall occurring. Concern was developed that a windblast may be imminent and precautions taken.

During continued extraction the strata gave <u>slight</u> indications of a fall. The face crew stopped mining and as a precaution started to walk to their safe haven. Without extra warning the goaf collapsed inducing a powerful windblast. Several workmen received very serious injuries, one life threatening when struck by flying timber breaker props.

RESULTS OF INITIAL INVESTIGATION:

- The initial goaf fall was delayed by the excessive amount of coal being left in the goaf.
- The goaf fall showed virtually no warning signs (which can be expected at shallow cover).
- The windblast destroyed face and panel ventilation. Ventilation structures 2km distant were adversely affected by the windblast.
- The placing of brattice on the goaf side of breaker props, created a "sail" effect propelling the timber breakers onto workmen who were walking from the area.

PRELIMINARY RECOMMENDATIONS

- Minimize coal being left in the goaf whilst attempting to induce an initial goaf fall.
- Anticipate a sudden failure of the goaf, whilst at shallow cover and prepare for windblast potential.
- Closely scrutinise mine practices to minimize the potential for a windblast to propel solid objects along roadways.
- Consider replacing passive supports at the goaf edge (at least until the initial goaf collapse) by bolting systems.

B. R. McKENSEY,

CHIEF INSPECTOR OF COAL MINES.



Report No: SA98-07 Date: 6 October 1998