

SAFETY ALERT

People put at risk inside blast exclusion zone

INCIDENT

Employees and infrastructure were put at risk when a face-burst projected flyrock material up to 450m from the blast area. This incident became even more serious when it was discovered that not all personnel had been removed from the exclusion zone.

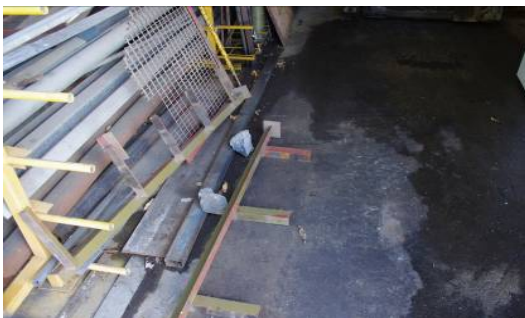
CIRCUMSTANCES

The quarry has a third-party asphalt plant on site which is located inside the exclusion zone and is required to evacuate during blasting activities. Informal systems to alert third-party personnel and employees to evacuate have previously provided adequate control to ensure the exclusion zone is clear. On this day the system failed.

INVESTIGATION

The investigation found that despite the efforts of quarry management to ensure that the exclusion zone was clear of personnel the informal system failed to establish beyond doubt that all persons had been accounted for and were at the previously established muster point. Failures included:

- Inadequate consideration in establishing the exact boundaries of the exclusion zone
- Absence of a formal procedure to account for all personnel
- Complacency on behalf of persons leaving the site
- Inadequate communication systems relating to blasting notification



Flyrock in storage shed (approx 250m)



Flyrock damage to building

RECOMMENDATIONS

- Clause 41 of the *Mine Health and Safety Regulation 2007* requires the mine operator to take into consideration exclusion zones when assessing risks associated with explosives.
- The requirements for an exclusion zone shall be a component of the sites blast management plan.
- When determining the requirements for the establishment of an exclusion zone, reference should be made to relevant standards, including **AS 2187.2 Explosives – Storage and Use Part 2: Use of Explosives, Appendix 'L'**.
- After extensive consultation a competent person shall determine the size and shape of the exclusion zone.
- The exclusion zone should be clearly marked on a plan and written procedures shall be developed for the establishment and disestablishment of the exclusion zone.
- Site briefings shall be conducted for personnel involved with the establishment and disestablishment of the exclusion zone.

NOTE: Please ensure all relevant people in your organisation receive a copy of this Safety Alert, and are informed of its content and recommendations. This Safety Alert should be processed in a systematic manner through the mine's information and communication process. It should also be placed on the mine's notice board.

Signed



Rob Regan
DIRECTOR
MINE SAFETY OPERATIONS BRANCH
INDUSTRY & INVESTMENT NSW

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