

SAFETY BULLETIN

DATE: FEBRUARY 2020

Failure of highwalls, low walls and dumps

This safety bulletin provides safety advice for the NSW mining industry.

Issue

Several incidents have been reported recently where people and equipment have been exposed to significant health and safety risks as a result of highwalls, low walls and dumps failing.

Circumstances

These types of failures can occur at any time in open cut mines and quarries.

Incidents reported to the NSW Resources Regulator show the frequency of this type of incident increases significantly during and post wet weather events.

Figure 1 Recent highwall failure February 2020



Figure 2 Recent highwall failure January 2020



Recommendations

It is recommended mine operators ensure that:

1. The installation and maintenance of water drainage to prevent the pooling of water on highwalls, low-walls, dumps and low-lying areas.
2. Pumps are installed and operational where required, prior to wet weather events occurring, to assist in water management.
3. Thorough inspections are completed on all highwalls, low-walls and dumps by open cut examiners and supervisors, prior to starting, and during mining operations, with the results of inspections recorded and communicated at pre-start meetings.
4. Increased inspections of highwalls, low-walls and dumps during wet weather and prior to restarting work near walls, dumps and geotechnical faults.
5. Workers are to monitor conditions in their work areas for the condition of walls and dumps during drilling, blasting and excavation operations and report any changes to their supervisor.
6. Walls must be cleaned during excavation to prevent loose material causing hazards.
7. Avoid working near, or parking vehicles and equipment under, or on the edge of highwalls and low-walls during and post wet weather events.

8. Geotechnical assessments completed by geotechnical engineers and regular reports on hazards are provided to all workers.
9. Where possible, use drones to inspect wall and dump conditions, particularly post wet weather events, for detection of failures and the pooling of water.
10. Access is provided above and below walls and dumps to allow thorough inspections to be completed by competent persons.
11. Access is restricted to high risk areas (e.g. dykes and faulted areas, below walls and dumps), until hazards in these areas can be identified and controlled.

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

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