

Working near slopes in quarries

This alert highlights the risk of working near the crest and toes of slopes in quarries and provides advice on how to reduce the risk of slope failure.

May 2016

Background

In a recent incident, a fatality occurred at a quarry when a dump truck was tipping waste material over the crest of a dump head and the slope failed.

Tipping off or extracting rock, sand, or gravel from or in the vicinity of a slope may put employees or independent contractors at risk of:

- falling from the crest of the slope
- being engulfed by materials from sliding, collapsing or subsiding slopes
- being struck by falling materials or plant.

Figure 1: quarry slope failure



Control measures

Risks associated with working near the crest and toes of slopes in quarries can be controlled by:

- conducting geotechnical stability assessments of slopes, including pit operating faces, overburden faces, overburden dumps, product stockpiles, and tailing dam embankments
- providing employees and independent contractors with information, instruction, training or supervision to enable them to perform their work in a way that is safe and without risks to health and safety
- ensuring that safe systems of work are in place and include:
 - o loading and unloading material near slope faces
 - o working near slope faces (eg preparing shots), and
 - o conducting regular visual inspections, particularly after heavy rain events, for signs of geotechnical hazards (for example, cracks in the slope face).

Note: Geotechnical advice, including stability assessments, should be undertaken by a suitable competent person (for example, a geotechnical engineer).

WorkSafe Victoria publications:

[Preventing falls from quarry faces](#)

[Your health and safety guide to quarries](#)

[Mobile plant overturns](#)

Other publications:

Construction Material Processors Association guidance, *Working safely with geotechnical risk in quarries*.



Disclaimer: This Alert contains information following WorkSafe's inquiries into the incident at the date of this report. The information contained in this report does not necessarily reflect the final outcome of WorkSafe's action with respect to this incident. WorkSafe does not warrant the information in this report is complete or up-to-date, and does not accept any liability to any person for the information in this report, or its use.