

Opal mining fatality

Mines safety alert no. 333 | 28 November 2016 | Version 1

What happened?

An opal miner who had been working alone was found deceased in a collapsed trench at his remote Winton District mining claim. The incident was discovered some time after the collapse by a neighbouring miner who raised the alarm.

How did it happen?

It is believed the miner was working with hand tools in the bottom of the trench and had mined into (undercut) one side of the trench wall when part of the undercut section of the trench wall collapsed (refer photo 1).

Comments

The incident highlights the hazards associated with trenching and the undercutting of trench walls.

When entering or working in a trench there is a hazard of a wall collapse, the risk of which increases:

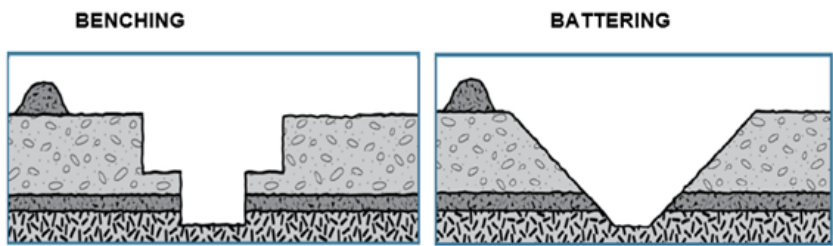
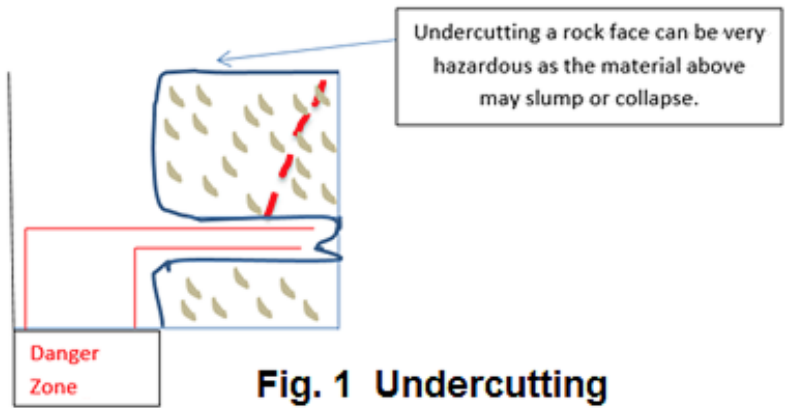
- as the trench gets deeper
- if the trench is not benched or battered, and
- where trench walls have been undercut or are overhanging.

Undercutting a trench wall occurs when excavations into the wall result in material over hanging the excavation. The overhanging material is not supported and may fail, (see figure 1) and the potential for failure increases if the material is weathered or unconsolidated.

A fatality occurred in the Kynuna area in 1991 when a miner was buried under a slump of ground from a pit wall three metres high. The Mining Warden's inquiry recommendation from that fatality was to strip back to a stable angle and a space maintained to ensure a clear retreat in the event of a rock fall.

Recommendations

- Before entering a trench assess the potential for material to fall or collapse from the walls.
Where there is potential for material to fall or collapse, ensure that effective controls to prevent this are established,
- e.g. benching or battering, (see figure 2).
- Where trench depth exceeds 1.5 metres benching or battering of walls should be considered as mandatory controls
Never undermine a trench wall or work under overhanging material. Where material is identified and sought in a side
- wall, bench or batter the wall to reduce the wall height and increase stability.



Issued by the Queensland Department of Natural Resources and Mines

Placement: Place this announcement on noticeboards and ensure all relevant people in your organisation receive a copy.