



## Significant Incident Report No. 198

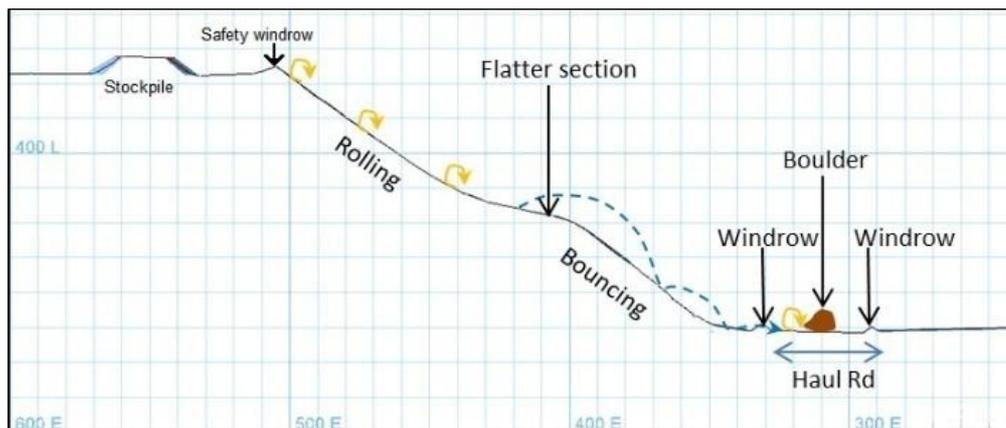
**Subject:** Large boulder falls onto active haul road

**Date:** 16 June 2014

### Summary of incident

There was a potentially serious incident at a mine when a boulder weighing about 50 tonnes rolled down a steep slope and came to rest on an active haul road.

A loader operator working on a stockpile about 70 metres above the haul road had dislodged the boulder from the edge of the stockpile during night work. The boulder rolled down the slope, bounced over a roadside windrow and landed on the haul road. It had travelled about 100 metres in horizontal distance from its original position. Fortunately, there were no vehicles operating on the road at the time and no one was injured.



Cross section of work area showing locations of stockpile, safety windrow and boulder on the haul road



Photographs showing boulder's original and final positions; and size of boulder

### Direct causes

- The loader pushed into material causing the boulder to move.
- The safety windrow was inadequate to prevent rocks falling over the edge of the slope.

## **Contributory causes**

The hazards associated with rocks falling from the stockpile were not identified during its planning, design, construction and operational phases. This meant that:

- the stockpile was built too close to the edge of the slope
- a haul road was built directly beneath the stockpile following mine expansion
- the control measures that were in place were inadequate.

## **Actions required**

Managers and supervisors are reminded of the importance of conducting detailed hazard identification and risk assessments during stockpile planning, design and construction. Factors to consider include:

- potential for rocks to fall from stockpiles onto other infrastructure
- use of control measures such as windrows to redirect or contain moving rocks
- measures to restrict access below a working area
- relevance of planned shift inspections to the hazards of work areas of the mine.

## **Further information**

Visit [www.dmp.wa.gov.au/ResourcesSafety](http://www.dmp.wa.gov.au/ResourcesSafety) for information on occupational safety and health in the resources sector.

This Significant Incident Report was approved for release by the State Mining Engineer on 16 June 2014