Significant Incident Report No. 196

Subject: Front tyres of light vehicle over open edge

Date: 27 May 2014

Summary of incident

To provide access to another location within a mine, a light vehicle track was pushed through broken ground following blasting. However, one week before the incident described here, part of the blasted area had been excavated.

A blasting supervisor was inspecting locations for suitable road block positions for a nearby planned blast. He called up to request permission to pass through the demarcated blasted area. Believing he was in a different work area, permission was granted.

The supervisor then drove towards the open edge that had been left exposed. His vehicle was travelling slowly enough to enable him to stop it before driving completely over the edge. Almost two metres of the vehicle, including the front wheels, were left perched about five metres above the excavated floor. The supervisor was able to exit the vehicle without further incident.

Direct causes

- A light vehicle track was constructed over blasted ground that was subsequently excavated.
- Area inspections had not identified the light vehicle track, nor the need to construct a bund to prevent access to the mined area.
Contributory causes

- The light vehicle track over blasted ground had not been:
  - approved by the Quarry Manager
  - surveyed
  - recorded on plans.
- The excavator operator did not know there was a site requirement to report the excavation of tracks to his supervisor. This requirement was not explicit in the training processes.
- Demarcation signs did not have specific location information that could be used during call ups.
- The inspection regime for mining areas did not match the rate of change in the work environment.

Actions required

Review the site’s traffic management plan with respect to:

- the use of light vehicle tracks
- the demarcation of mining areas
- how changes will be captured and transmitted to those affected.

The following actions will help improve traffic management at surface mining operations, particularly for light vehicles:

- Eliminate the development of light vehicle access tracks or roads over blasted ground. If this is not possible, only the mine manager should be able to authorise the creation of such tracks or roads.
- Implement a system for reporting the creation of tracks and roads, including new intersections.
- Survey, demarcate and add all light vehicle tracks or roads to mine production plans.
- Implement an inspection schedule around mine areas to identify tracks and roads being used by light vehicles that may be affected by mining operations.
- Ensure tracks and roads that will be affected by mining operations are made inaccessible.
- Ensure the locations of tracks and roads are correctly identified on demarcation signs to assist with call ups when requesting access permission.

Further information


This Significant Incident Report was approved for release by the State Mining Engineer on 27 May 2014