

ACCIDENT/INCIDENT ALERT

15 October 2004

Primary Hopper – Fall Fatality

Accident

A quarry worker was fatally injured when he fell 2.2 metres into an almost empty primary feed hopper of a crushing plant.

Circumstances

The worker had reversed his truck up to the primary hopper in order to discharge a load of quarried material.

He then walked to the rear of his truck, before falling into the hopper.

In order to discharge the load, it was not necessary to leave the truck. It is unknown why the driver did so.



Investigation

The investigation disclosed that:

1. Nothing prevented workers falling into the hopper while standing close to it, using a rod to free materials that were stuck or jammed on the sides of the hopper. This condition was common, particularly when the quarried material was wet, and

2. While guardrails existed at the sides of the vehicle approach to the hopper, a dedicated observation area did not exist, should such an area be required for viewing into the primary hopper.

Remedial work occurred for both of these conditions, resulting in the use of:

1. A securely anchored static line to which a safety harness is attached, to minimise the harm that could occur should a person fall. For ease of accessibility, the static line and harness are kept in a securely locked weatherproof cabinet a few metres from the primary hopper.



2. An observation walkway with top and mid guardrail protection and an end return platform was erected to the driver's side of the approach to the primary hopper.



Recommendations

The investigation reinforced the fact that a person can fall a short distance and sustain serious (in this case fatal) injury.

As part of their hazard identification, those who operate quarries, mines and other workplaces, need to identify hazards, including exposure to falls, and take all practicable steps to ensure people are not harmed from that exposure.

While not always possible, isolation (use of guardrails, barriers, or gates) is the preferred method of fall prevention, rather than minimisation through the use of safety harnesses.

Another way to prevent exposure to a fall is to 'design out' that exposure. That is, carrying out the task in a different way so a person is not exposed to a fall.

Further information to consider:

Guidelines for the Prevention of Falls (OSH 2000)

Guidelines for Identifying Hazards Associated with Crushing and Screening Plants in Mines and Quarries. (Ministry of Commerce 1995)

This document is due for renewal by industry and OSH.

OSH internet site: www.osh.dol.govt.nz