

General Workplace Inspectorate

Promoting Safety and Health in the Workplace

ACCIDENT/INCIDENT ALERT

19 June 2002

Fatality While Unloading a Semi-Curtainsider

Introduction

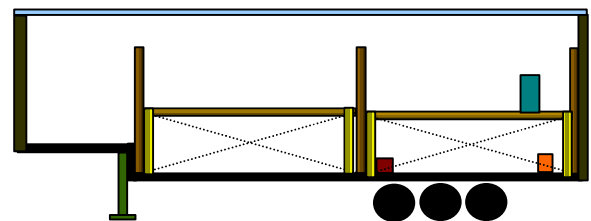
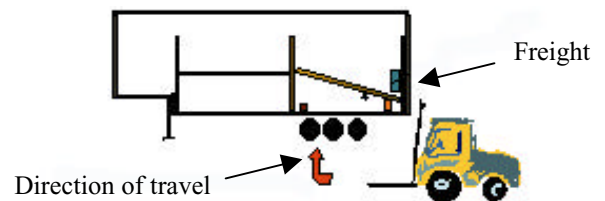
On 30 May 2001, a 30-year-old male employee died when assisting other workers to remove freight from a semi-curtainsider at the company's depot in Christchurch. He was killed when the mezzanine floor fell and crushed him. The semi-curtainsider was being used to transport line-haul freight.

Background

The semi-curtainsider was a three-wheeled dual unit. The main deck has a metal frame with a plywood floor, before being stepped with another deck of similar construction. At the stepped section, the unit is equipped with a pair of stabilising feet that are lowered during the transition of vehicles at the ferry terminals and at the depot, while either unloading or loading.

The main deck of the 13-metre semi-curtainsiders is divided into three sections, two on the main deck and the other being the goose neck area. On the main deck are two metal and wood mezzanine structures, supported by three trestles.

The mezzanine floors are attached to each trestle using platform support brackets. Two support brackets are welded onto each end of the mezzanine floor. Each floor weighs approximately 1200 kg and is adjusted by a



forklift according to the maximum height of the freight.

After loading, each mezzanine floor section is secured (diagonally) by 8 ton linked chain on each side tensioned to prevent movement during transit (LTSA requirement). In addition, certified strops are placed over the load and secured to the semi-curtainsider.

What Happened

On the day of the accident the semi-curtainsider arrived in the depot, the tractor unit was separated and driven off. No visual check was made of the freight for movement before the tie downs, chains, etc., were removed.

Most of the freight had been removed using several forklifts, and the use of part-time university students. Two heavy items were left on the lower floor and one larger item on the upper rear mezzanine floor. While the deceased was handling one heavy article on the lower floor the forklift returned and in the process nudged the middle trestle, causing the mezzanine floor at the other end to drop.

Investigation

The investigation revealed that the floor fell because it was not secured on the hooks of the rear trestle, but was either balancing on the 25 mm lip of each hook or on the top of each hook itself.

Solutions to prevent a similar accident occurring include:

1. Change mountings on the mezzanine floor to be more positive.
2. In addition to the LTSA requirements, secure the mezzanine floors to the lower floor by certified strops.
3. Develop systems to ensure loads are inspected, and any hazards identified, before the unloading commences.
4. Ensure workers are not under the mezzanine floors when either a forklift or other workers are carrying out tasks.
5. Check that the mezzanine floors are securely attached and haven't been dislodged during transit.
6. Develop procedures for forklift drivers and employees unloading these line-haul units.

For further information, please contact your local OSH regional office.