

Cement Silo Incident Results in Worker Injuries

SAFETY ALERT

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Enform

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Description of Incident

During rig move operations, a cement silo was being pulled over with a bed truck. The silo landed on the bed truck with much greater force than anticipated, causing the truck to jolt from the impact of the silo. The jolt caused the truck driver's chest to hit against the steering wheel resulting in a cracked sternum. The driver's forehead struck against the overhead cab console resulting in minor facial injuries. In addition, the cement silo and bed truck were damaged.

	<p>Cement silo, with 55 tons of cement in it, lying on the bed truck after the incident. The crew verified the tank level by tapping with deck pins on its sides. They concluded that the tank was empty based on the sound it made.</p>
	<p>Close-up of damaged skid on the passenger side of the bed truck.</p>

By industry, for industry



Damage to steering wheel from the impact of the driver's chest hitting it.

Key Findings

Two key measures would have prevented this incident had they been implemented:

- 1) **Communication** of the presence of cement in the storage silo. All persons involved in the rig move were unaware that there was cement (55 tons) in the silo; that was discovered only after the incident.
- 2) **Effective verification** to confirm that the cement silo was empty. Tapping on the side of the silo is not an effective method to verify the presence of cement in the silo.

Corrective/Preventive Actions

Investigation provided the following learnings/recommendations:

- Written hand-over notes are recommended for all cement supervisor changeovers prior to leaving at the end of the work schedule.
- No load should be lifted unless the load weight can first be verified. All tanks should be physically checked for their contents prior to moving.
- Physical verification of the tank level can be established by pressurizing and being blown down empty into a bulker (prior to moving).
- Other control measures such as tags (green tags and lockout tags) and sign off sheets or checklists should be used to avoid miscommunication.
- Ensure daily communication of cement stock status to all rigs, and distribution of post-cement job inventory reports.