Could This Have Been You?



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On average, 5,000 to 6,000 workers are killed each year. Learn from the following reports of real workplace fatalities to avoid a similar fate.

Tell your crew about what happened to these workers. Failing to identify hazards before a job leads to many accidents in the oil and gas industry.

What Happened?

A fatal accident occurred on a drilling rig where a stabbing board, weighing half a ton, fell 45 feet (15 meters) from the derrick, striking a driller who happened to be underneath. Despite prompt medical care the driller died two hours later.

Background

While the crew was running casing, a stabbing board, which allows a derrickman to work at height in the derrick, was in use. The stabbing board is normally raised and lowered on vertical tracks by an electric winch. After about 10 hours of work the electric winch failed.

The company representative was only informed that a small electrical repair was necessary. An electrician was called but he found that the repairs would actually take some time. No permit to work was issued. A temporary alternative was proposed: use a one ton SWL chain block to raise and lower the stabbing board. The chain block used was not appropriately marked with the current lifting equipment color code.

The board was raised and secured in place at high above the rig floor using its upper manual locking bolts. The derrickman attached his safety harness to the board, not to the fall arrestor. After installation it appeared that the chain block had some slack between it and the board. The upper manual locking bolts were withdrawn by force. With their sudden release the board dropped as the slack chain was taken up. The chain broke, apparently due to shock loading. The stabbing board’s lower safety latches failed which would have stopped its descent. Earlier in the shift, the lower track safety stop had not been fitted. As a result, there was nothing to prevent the board from falling. The board struck a driller working on the rig floor causing a fatal head injury. The derrickman fell with the board as his safety harness was attached to it. He suffered serious injuries.

What Caused It?

1. Failure to follow company procedures
2. Lack of risk evaluation and management
3. Lack of personnel competence and training
4. Insufficient audits and inspections of the rig
5. Use of unsafe equipment

Corrective Actions

Procedures

- Develop operating procedures for safe use of the stabbing board, including prevention of equipment falling from the board.
- Define a safe method of raising and lowering the stabbing board in the event of winch failure.

Competence/Training

- Adequate training to be given and recorded before use of the board and access restricted to trained persons only.

Risk Assessment

- Job Hazard Analysis must be carried out before the job.

Work Practices

- Attach a derrickman safety line to a solid part of the structure, not to the stabbing board.
- The company representatives must be kept informed of changes to work planned to allow them to assess work and spend time on the drill floor when necessary.

Equipment

- Safety line should include a shock absorbing lanyard.
- Stabbing board track stops must be installed and sufficiently reinforced to support the impact of a falling stabbing board.
- A backup anti-fall device above the stabbing board associated with an overspeed system, which should stop any accidental fall in case of chain rupture is preferable to stops situated below.
- Ensure that safety latches (upper and lower) are working and tested regularly.
- Inspect all items of lifting equipment regularly.