

# Lessons Learned

From the U.S. Army Engineer Support Center  
Huntsville

**ACCIDENT:** Worker was leak testing a joint in the Brine Reduction Area Building at the Umatilla Chemical Demilitarization construction site when he fell through an opening on a scaffold. The employee was wearing a personal fall protection harness but did not have the safety lanyard attached to an anchor point.

**Date:** 29 December 1999

**WHAT HAPPENED:** Worker was conducting a pressurized test on some duct work from an elevated scaffold. One floorboard and the vertical support for the handrail had previously been removed to allow for the removal of the old duct and were not replaced. A toe board was nailed into place where the floorboard was removed, but an opening of 14 ½ inches was still present between the scaffold handrail and the scaffold floor.

Since the scaffold was incomplete, a sign was posted requiring all employees to use 100% fall protection. The employee stated that he had both safety lanyards in his hand and was looking for an attachment point when he stepped backwards and fell through the opening.

As he fell, he grabbed the toe board. The toe board broke and he fell to the floor approximately 20 feet below.

## **CONTRIBUTING FACTORS:**

- Fall protection was not a high priority and was not enforced. (OSAH issued a citation for fall protection just a few weeks prior to this accident.)
- Scaffold was not restored to a safe condition after a board and parts of the handrail had been removed.
- Work was allowed on the unsafe scaffold with the restriction of 100% fall protection.
- Employee was not fully trained and failed to use his personal fall protection properly.

**RESULTS:** Employee sustained a broken femur, a dislocated shoulder and numerous bruises and abrasions.

## **LESSONS LEARNED:**

**Reference- EM 385-1-1, USACE SAFETY & HEALTH Requirements Manual**

- **Don't allow personnel to work on scaffolds that are missing floorboards or guard rails.**

22.B.03 Working levels of work platforms shall be fully planked or decked.

22.A.02 Work platforms shall comply with appropriate access and fall protection requirements of Section 21.

b. Standard railing and handrails for work platforms shall be in compliance with the requirements of Section 21 and personal fall protection devices and safety nets shall be in compliance with the requirements of Section 21C.

- **Ensure personnel are trained on the proper use of personal fall protection systems.**

21.A.16 Training

a. Each employee who might be exposed to fall hazards shall be trained by a competent person qualified in the following areas, in the safe use of accessways and fall protection systems and the recognition of hazards related to their use, including:

(1) the nature of access and fall hazards in the work areas,

(2) the correct procedures for constructing, erecting, maintaining, using, and dismantling accessways and fall protection systems,