

Case 439. 26-year-old painter died from injuries sustained in a 30-40 foot fall from a two-point suspended scaffold (swing stage scaffold) when one of the two anchor points appear to have failed.

A 26-year-old male painter died from injuries sustained in a 30-40 foot fall from a two-point suspended scaffold (swing stage scaffold) when one of the two anchor points appear to have failed. The decedent and a coworker were members of a 5-person crew sandblasting the interior of a 2,000,000-gallon water tank. On the day of the incident, there was limited lighting within the bowl when the decedent and his coworker relocated the scaffold to a different location after the lunch break. To relocate the scaffold, the crew attached to a cable which was previously installed. The company had dropped many cables down so employees could move from one cable drop to the next. Third party investigation found: a) the scaffold was attached at one end and the other end was completely hanging 9 feet from the ground of the bowl; b) the pulley system was intact and free from any visual damage; c) swing stage connector was intact; d) shackles and screw found on the ground in the bowl in debris (3-5 feet apart); e) shackle with screw in it found 9 feet under the scaffold in the debris; f) anchorage hole had no visible markings and/or damage. It was hypothesized by non-MIOSHA personnel that the clevis pin pulled through the anchoring shackle causing the scaffold to fail. Coworkers on scene heard a loud noise/boom. Finding the two workers on the floor of the bowl, emergency response was called. The decedent was airlifted to a nearby hospital and died several days later from complications of the injuries sustained at the time of the incident.

MIOSHA Construction Safety and Health Division issued Serious and Other-than-Serious citations to the employer at the conclusion of its investigation.

SERIOUS: SCAFFOLDS AND SCAFFOLD PLATFORMS, CS PART 12

- **RULE 408.41209(1):** This rule supplements and clarifies the requirements of R 408.40114(2) of construction safety standard Part 1. General Rules as the rule relates to the hazards of work on scaffolds. An employer shall have each employee who performs work on a scaffold trained by a person qualified in scaffold safety. The training shall enable an employee to recognize the hazards associated with the type of scaffold being used and to understand the procedures to control or minimize the hazards. The training shall include the following areas as applicable:
 - a) The nature of any electrical hazards, fall hazards, and falling object hazards in the work area.
 - b) The correct procedures for dealing with electrical hazards and for erecting, maintaining, or disassembling the fall protection systems and falling object protection systems being used.
 - c) The proper use of the scaffold, and the proper handling of materials on the scaffold.
 - d) The maximum intended load and the load-carrying capacities of the scaffolds used.
 - e) Any other pertinent requirements.

Employees working from 2-point suspension scaffold without training provided by the employer.

- RULE 408.41210(6): Scaffolds and scaffold components shall be inspected for visible defects by a competent person before each work shift and after any occurrence that could affect a scaffold's structural integrity. Any scaffold, including accessories such as braces, brackets, trusses, screw legs, ladders, or platforms, that is damaged or weakened from any cause shall be immediately repaired or replaced. Any scaffold or accessories that are repaired shall have at least the original designed strength of the scaffold or accessory.

Scaffold not inspected before use.

- 408.41212(8): A suspension rope, including connecting hardware, used on non-adjustable or adjustable suspension scaffolds, shall be capable of supporting, without failure, not less than 6 times the maximum intended load applied or transmitted to the rope.

Employees fell 30 to 40 feet when scaffold anchor system failed.

- RULE 408.41213(2): An employee on a boatswain's chair, catenary scaffold, float scaffold, needle beam scaffold, or ladder jack scaffold shall be protected by a personal fall arrest system. An employee on a single-point or 2-point adjustable suspension scaffold shall be protected by both a personal fall arrest system and a guardrail system.

Employees fell 30 to 40 feet without the use of a personal fall arrest system.

- RULE 408.41229(5): Before a scaffold is used, a competent person shall evaluate direct connections. The competent person shall confirm, based on the evaluation, that the support surfaces are capable of supporting the loads to be imposed. In addition, an engineer who is experienced in multi-point adjustable suspension scaffold design shall design the multi-point adjustable suspension scaffold connections.

Employees fell 30 to 40 feet when the two-point suspension scaffold they were working from collapsed.

- RULE 408.41240(3): Suspension ropes and cables shall be connected to the overhead supporting members by shackles, clips, thimbles, or other means that meet the strength and durability of the suspension ropes and cables.

Employees fell 30 to 40 feet when the two-point suspension scaffold they were working from collapsed.

SERIOUS: GENERAL RULES, CS PART 1, RULE 408.40132(2):

Before beginning a project, provision shall be made for prompt medical attention in case of serious injury.

Employees fell 30 to 40 feet when the two-point suspended scaffold, without ensuring prompt rescue could be performed by the Fire Department.

OTHER-THAN-SERIOUS: RECORDING AND REPORTING OF OCCUPATIONAL INJURIES AND ILLNESSES, ADM PART 11, RULE 408.422139(2):

Within 24 hours after the inpatient hospitalization of 1 or more employees or an employee's amputation or an employee's loss of an eye, as a result of a work-related incident, you must report the inpatient hospitalization, amputation, loss of an eye to MIOSHA.

MIOSHA was not notified of the fatality and injury within 8 hours of the accident.