

Case 76. 34-year-old male painter was killed after falling approximately 90 feet from a high-tension transmission tower.

On May 5, 2004, a 34-year-old male painter was killed after falling approximately 90 feet from a high-tension transmission tower. The victim and three other coworkers were assigned to paint the tower. After climbing to the top, they took a break. The victim was wearing a lineman belt with a single 6-foot lanyard. Prior to painting, the victim hooked his pelican hook to a structural steel angle that secured a cross member beam. This steel angle piece was missing a bolt. Company procedures required that the workers, before stepping onto a crossmember, kick the crossmember before stepping on it. It is unknown if the victim followed this procedure or if he did follow the procedure he may have not applied sufficient pressure. When the victim stepped onto the beam to begin his painting operation, the beam came apart from the tower, the angle gave way, and the beam bent. The victim fell from the beam and his hook and lanyard slipped off the end of the beam. The victim fell to the ground below. Emergency personnel pronounced the victim dead at the scene.

MIOSHA issued the following Serious citations to the employer:

Serious:

FALL PROTECTION, PART 45, RULE 4502, REF OSHA 1926.501(a)(2).
The employer shall determine if the walking/working surfaces on which its employees are to work have the strength and structural integrity to support employees safely. Employees shall be allowed to work on those surfaces only when the surfaces have the requisite strength and structural integrity.

Did not check the steel on the tower for unstable members before allowing employees to start painting the tower.

Serious:

FALL PROTECTION, PART 45, RULE 4502, REF OSHA 1926.501(b)(1).
Each employee on a walking/working surface (horizontal and vertical surface) with an unprotected side or edge which is 6 feet (1.8 m) or more above a lower level shall be protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest system.

INSTANCE A.

Employee is not tying off to a safe anchorage while painting a transmission tower. The tower was approximately 90 feet high, 340 KV live lines 7 feet below the steel that was being painted. The employee was exposed to falling 90 feet while moving around and removing the hook to get to a different hook-off point.

INSTANCE B.

Employees not using fall protection – 2 painters were observed not hooked off while sliding down angles when they were painting. The men were approximately 50 feet high.

INSTANCE C.

Painters were observed working on 2 towers not using fall protection. On 1 tower, an employee was approximately 30 feet high. On the 2nd tower, 2 employees were observed not tied off and were approximately 20 feet high.

Serious:

FALL PROTECTION, PART 45, RULE 4502, REF OSHA 1926.502(d)(16)(iii). Personal fall arrest systems, when stopping a fall shall: (i) limit maximum arresting force on an employee to 900 pounds (4kN) when used with a body belt, (ii) limit maximum arresting force on an employee to 1,800 pounds (8kN) when used with a body harness, (iii) be rigged such that an employee can neither free fall more than 6 feet (1.8m) for contact any lower level, (iv) bring an employee to complete stop and limit maximum deceleration distance an employee travels to 3.5 feet (1.07m) and, (v) have sufficient strength to withstand twice the potential impact energy of an employee free falling a distance of 6 feet (1.8m) or the free fall distance permitted by the systems, whichever is less.

NOTE: If the personal fall arrest system meets the criteria and protocols contained in Appendix C to subpart M, and if the system is being used by an employee having a combined person and tool of less than 310 pounds (140 kg), the system will be considered to be in compliance with the provisions of paragraph (d)(16) of this section. If the system is used by an employee having a combined tool and body weight of 310 pounds (140 kg) or more, then the employer must appropriately modify the criteria and protocols for such heavier weights, or proper protection for such heavier weights, or the system will not be deemed to be in compliance with the requirements of paragraph (d)(16) of this section.

Working 7 feet above 340 KV live wires while painting the tower and having a lineman belt with a 6-foot lanyard that is hooked to the steel employees are standing on. The employees were exposed to making contact with the live wires that were 7 feet below them.

Serious:

FALL PROTECTION, PART 45, RULE 4502, REF OSHA 1926.503(b)(1). The employer shall verify compliance with paragraph (a) of this section by preparing a written certification record. The written certification record shall contain the name or other identity of the employee trained, the date(s) of the training, and the signature of the person who conducted the training or the signature of the employer. If the employer relies on training conducted by another employer or completed prior to the effective date of this section, the certification record shall indicate the date the employer determined the prior training was adequate rather than the date of actual training.

No certification record of fall protection for the employees.