A 22 year old male employee fell 12' from a concrete platform during demolition when he stepped on a piece of cut concrete which flipped up dropping him to the ground then landing on him. The victim was completing demolition work on the mezzanine of a building.

The victim and another employee were assigned to work on the mezzanine and continue with the same demolition plan as the previous days. The two used the Genie aerial lift to gain access to the mezzanine. Both employees had on personal fall protection and were tied in while using the aerial lift. Once on the mezzanine, they did not tie into an anchor point while working near the edge of the mezzanine 12 feet above the ground below. The task for them was to clean the mezzanine of debris and make cuts with the concrete saw the length of the mezzanine. Once those cuts were made, they then made perpendicular cuts. The victim was responsible for spraying the concrete saw blade with water to help minimize or reduce the dust as the other was making the cuts with the concrete saw.

The plan was to make the perpendicular cuts and leave about six inches of concrete intact to hold the concrete in place. After these cuts were finished, they would then enter the Genie aerial lift and finish making the cuts from the lift. The foreman was with another two crew members on the ground floor cleaning up debris and operating the forklift that would lift the concrete slabs from the mezzanine to the floor. During interviews, it was determined that while the victim was spraying the saw blade, he stepped onto the portion of concrete that had been cut. When his weight was applied to the concrete slab it broke loose and he fell through the opening 12 feet to the ground below. The concrete slab fell from the platform and landed on top of him fatally crushing him. A forklift was used to raise the concrete slab enough for the ground crew to pull the victim out from underneath the concrete slab.

None of the crew had received training in the recognition and avoidance of unsafe conditions and the regulations applicable to the work environment to control or eliminate any hazards. The employer also did not initiate and maintain programs which provided for frequent and regular inspections of the job site, materials, and equipment to be made by a competent person.

Citation(s) as Originally Issued

A complete inspection was conducted at the accident scene. Some of the items cited may not directly relate to the fatality.

<u>Citation 1 Item 1</u> Type of Violation: Serious \$3200

29 CFR 1926.20(b)(2): The employer did not initiate and maintain programs which provided for frequent and regular inspections of the job site, materials and equipment to be made by a competent person(s).

In that regular inspections of the job site were not conducted by a competent person as evidenced by employees working at heights not tied off, uncovered holes on the mezzanine, employees allowed to work directly underneath demolition area, and area not being barricaded off.

<u>Citation 1 Item 2</u> Type of Violation: Serious \$2800

29 CFR 1926.21(b)(2): The employer did not instruct each employee in the recognition and avoidance of unsafe condition(s) and the regulation(s) applicable to his work environment to control or eliminate any hazard(s) or other exposure to illness or injury.

In that employees were working around hole openings on a mezzanine, were not using fall protection while working on the mezzanine, and were cutting apart the working surface from beneath them while on the mezzanine 12 feet above the ground below and did not recognize the hazards associated with the work being performed.

Citation 1 Item 3 Type of Violation: Serious \$5400

29 CFR 1926.501(b)(1): Each employee on a walking/working surface having an unprotected side or edge which was six or more feet (1.8m) or more above a lower level was not protected from falling by the use of guardrail systems, safety net systems, or personal fall arrest systems.

In that two employees involved in demolition of a mezzanine 12 feet above the ground below were wearing harnesses but not connected into an anchor point.

<u>Citation 1 Item 4</u> Type of Violation: Serious \$3200

29 CFR 1926.850(a): Evidence in writing was not available that an engineering survey performed by a competent person had been performed prior to permitting employee(s) to start demolition operations:

In that employees were working on and around the mezzanine being demolished and did not have an engineering survey to ensure that the work was done in such a manner as to prevent an unexpected collapse.

<u>Citation 1 Item 5</u> Type of Violation: Serious \$2800

29 CFR 1926.850(i): Floor openings, not used as material drops, were not securely covered.

In that old HVAC ductwork created floor openings on the mezzanine that were not adequately covered.

<u>Citation 1 Item 6</u> Type of Violation: Serious \$5400

29 CFR 1926.855(a): Openings cut in floors for the purpose of manual removal of floors did not extend the full span of the arch between supports.

In that cut sections of the mezzanine floor did not extend the full span of the arch between supports and collapsed, dropping an employee 12 feet to the ground below.

Citation 1 Item 7 Type of Violation: Serious \$2400

29 CFR 1926.855(b): Planks not less than 2 inches by 10 inches in cross section, full size undressed, were not provided for, and/or were not used by employees to stand on while breaking down floor arches between beams.

In that two employees breaking down floor arches on the mezzanine were not provided planks to stand on while breaking down the floor arches between beams.

Citation 1 Item 8 Type of Violation: Serious \$5400

29CFR1926.855(f): When floor arches are being removed, employees were allowed in the area directly underneath, and such an area was not barricaded to prevent access to it.

In that the area below the mezzanine being demolished was not barricaded to prevent employees from accessing it.

Citation 1 Item 9 Type of Violation: Serious \$2800

29 CFR 1926.855(g): Demolition of floor arches shall not be started until they, and the surrounding floor area for a distance of 20 feet, have been cleared of debris and any other unnecessary materials.

In that, employees started demolition of the mezzanine floor arches and the surrounding area had not been cleared of debris and unnecessary materials.













