Case 40. 35-year-old electrician was killed while changing lights in an overhead traffic signal when the boom supporting the vehicle-mounted aerial work platform he was working from was struck by a semi-truck.

On May 28, 2003, a 35-year-old electrician was killed when the boom supporting the vehicle mounted aerial work platform he was working from was struck by a semi-truck passing underneath it. The electrician and his partner had been changing lights in an overhead traffic signal above a traffic intersection. The work had been completed, but he had returned for something they had forgotten. Their boom truck was parked in the far right lane of the three lanes entering the intersection from the west. The far left lane was a left turn lane; the middle lane was a through lane. The incident happened near midnight. The boom was extended out over oncoming traffic to enable the aerial work platform to reach the work area 13 feet 5 inches above the intersection. The top of a semi truck proceeding east in the middle lane struck the boom. The boom was damaged, but the aerial work platform did not fall. The electrician was propelled out of the aerial work platform onto the street approximately one half block away where he struck his head on the pavement. The injury resulted in his death.

MIOSHA issued the following "Serious" citations to the employer.

- 1. Inadequate traffic control devices were used. The employees were engaged in working on a traffic signal light fixture over oncoming traffic, using a vehicle-mounted aerial work platform to access the work area 13 feet five inches from ground level. The overhead traffic lights are seven feet outside of the control zone enclosure, exposing employees to oncoming traffic. (Signals, Signs, Tags, and Barricades, Part 22, Rule R408.42221(1))
- 2. The employer did not provide adequate training to recognize hazards related to traffic control hazards and placement of traffic control devices. Four plastic cones were used in front of and at the side of the vehicle mounted aerial work platform. Employees were working seven feet outside of the plastic cone enclosure over unprotected lanes for oncoming traffic. (Signals, Signs, Tags, and Barricades, Part 22, Rule R408.42221(2))
- 3. There was no site inspection prior to the work operation. Employers shall ensure that all operations have routine inspections of traffic control elements for acceptable levels of operation. When traffic exposures are such that signs, signals, or barricades do not provide the necessary protection on, or adjacent to, a highway or street, traffic regulators or other appropriate traffic controls shall be provided. Modification of traffic controls such as additional signs or devices, or a change in work operations, shall be determined by a qualified person who is responsible for the project traffic control. (Signals, Signs, Tags, and Barricades, Part 22, Rule R408.42223(2))
- 4. The employer did not ensure that the employee was using fall protection. A safety harness with a lanyard which is in compliance with Construction Safety Standard, Part 45, Fall Protection, being R 408.44501 et seq. of the Michigan Administrative

Code, and which is affixed to attachment points provided and approved by the manufacturer shall be provided by the employer and used by any occupant of an aerial work platform described in the provisions of R408.43202(a) and (c) and figures 1 and 3. A fall arrest system shall only be used where the aerial lift is designed to withstand the vertical and lateral loads caused by an arrested fall. (Aerial Work Platforms, Part 32, Rule R408.43209(11))

5. The operator of the aerial work platform did not have a permit to operate the aerial lift platform. (Aerial Work Platforms, Part 32, Rule R408.43209(11))