

Case 302. 27-year-old road surveyor died when he was struck by a vehicle entering a work zone.

A 27-year-old male road surveyor died when he was struck by a vehicle entering a work zone. The work area was a freeway entrance ramp lane on a three-lane eastbound expressway (Freeway 1). The entrance ramp lane and the right lane of the expressway had been closed via traffic cones leaving the middle and left eastbound lanes open. The entrance ramp from another freeway (Freeway 2) entering onto the incident freeway had been tapered, but no advanced warning signs for upcoming road construction had been placed either on Freeway 2 or its entrance ramp to Freeway 1. Advanced warning signs were placed 1 ½ miles west of the work area on Freeway 1. The decedent and his coworker had parked their work truck east of their work area on shoulder of the highway. The truck's flashing light was activated. The decedent and his coworker were in the process of measuring catch basins in the entrance ramp lane under a bridge when the incident occurred. A vehicle driving down the Freeway 2 entrance ramp tried to enter Freeway 1 by pulling in front of a semi traveling in the middle lane, which was slowing due to the slowed traffic. The semi attempted to avoid the collision but could not do so. The back of the merging vehicle was struck by the semi, propelling the vehicle to the right and into the work zone. The decedent's coworker heard a braking sound and dove over the bridge pier. The decedent's coworker observed the vehicle come through the cones into the work zone and strike the decedent. The vehicle then struck their work truck and pushed it forward. The vehicle continued on and struck the bridge pier and came to a stop. The decedent was transported to a nearby hospital where he was declared dead.

MIOSHA Construction Safety and Health Division issued the following Serious citations at the conclusion of their investigation:

SERIOUS: RECORDING AND REPORTING OF OCCUPATIONAL INJURIES AND ILLNESSES, PART 11, RULE 1139(1):

- An oral report of a work-related incident resulting in a fatality or the inpatient hospitalization of three or more employees was not made within eight hours after the occurrence to the Michigan Department of Energy, Labor, and Economic Growth, Michigan Occupational Safety and Health Administration, State Secondary Complex, 7150 Harris Drive, P.O. Box 30644, Lansing, Michigan 48909, phone 1-800-858-0397.

A fatality was not reported within eight hours after a work related accident. Employees were engaged in surveying catch basins on a freeway.

SERIOUS: GENERAL RULES, PART 1, RULE 114(2)(d):

- Instructions were not provided to each employee in the recognition and avoidance of hazards and the regulations applicable to his or her work environment to control or eliminate any hazards or other exposure to illness or injury.

The Accident Prevention Program (APP) was deficient in the instructions for the recognition and avoidance of hazards associated with working on a freeway. Employees were getting measurements of catch basins in a traffic lane.

SERIOUS: SIGNALS, SIGNS, TAGS, AND BARRICADES, PART 22 RULE 2221(2):

- Appropriate training for the work assignment for each employee engaged in activities covered by this part was not provided. The following is an example of the training that may be required:
 - a) Recognition of hazards, such as, but not limited to, possible masonry wall collapse areas, crane swing areas, floor opening covers, or traffic control hazards.
 - b) Traffic regulator training.
 - c) Proper placement and removal of signs, signals, tags, and barricades.
 - d) Training in how to perform work in proximity to traffic to minimize vulnerability.

Employees were not trained in the following:

- a. Recognize the hazards and the proper avoidance of these hazards associated with working on a freeway. Employees started work in the traffic lane before the Temporary Traffic Control (TTC) was set up and reviewed.
- b. Proper placement of signs and barricades. (TTC) was not appropriate for the actual roadway.
- c. Perform work in proximity to traffic & to minimize vulnerability. Employees were working with their backs to traffic. Employees were getting measurements of catch basins in a traffic lane.

SERIOUS: SIGNALS, SIGNS, TAGS, AND BARRICADES, PART 22, RULE 2223(1):

- Traffic control devices were not installed and maintained as prescribed in Part 6 of the 2005 MMUTCD, which is adopted by reference in R 408.42209.

The Temporary Traffic Control (TTC) plan used was inadequate for the conditions of the work zone. There were no advanced warning devices on freeway/freeway entrance ramp leading to incident freeway. Employees were getting measurements of catch basins in a traffic lane.