

**Case 333. 29-year-old career probationary fire fighter was killed in a building collapse at commercial structure fire.**

A 29-year-old male career probationary fire fighter was killed in a building collapse at commercial structure fire. The decedent was a member of a three-person initial entry team. The team entered a door located on the south side of the building at the east end deploying a 200-foot long, 1½-inch hose. Firefighter #1 controlled the nozzle, the decedent assisted and the acting Captain was the third entrant. Visibility was very limited. The door way access opened to a 60-foot long aisle running between two fixed banisters. While crawling on the floor, upon reaching the end of the banister, Firefighter #1 encountered a wall. He gave the decedent the nozzle and they moved to the right with the decedent now in the lead. At this point they began to encounter additional furniture (chairs, booths, stools) and worked their way around continuing to look for the fire. After approximately 25 minutes inside the building, the Captain observed his SCBA had one solid and one blinking light and determined the team needed to exchange bottles. He communicated with the decedent and Firefighter #1 and believed they all began to exit the building. Visibility was now zero. Firefighter #1 believed he was speaking with the decedent during their exit with the last contact made as he approached the door. Firefighter #1 and the acting Captain exited and then noticed that the decedent was not with them. MAYDAY, which would have ceased all radio traffic, was not made. The decedent responded to a radio inquiry that he was in another part of the building and was asked who he was with. Because radio traffic was not halted, another radio conversation was heard, which led to the belief that the decedent was with another crew. Later it was determined that a different conversation between crews working the fire was heard. Further attempts to contact the decedent met with negative results, however at one point a radio transmission was recorded where the decedent stated he was out of air. An aerial ladder team determined that the roof-mounted air handlers were about to collapse at which time an evacuation order was given. An immediate head count found the decedent unaccounted for, and the MAYDAY call was made. The building then collapsed prior to being able to locate and extricate the decedent. He was declared dead at the scene.

MIOSHA General Industry Safety and Health Division issued the following alleged Serious citation at the conclusion of its investigation.

Serious: FIREFIGHTING, PART 74, RULE 745(1):

The fire department did not establish and implement written procedures for emergency operations which included all of the following: (a) a requirement that a nationally recognized incident management system be implemented at each emergency, (b) a requirement that a personnel accountability system be implemented at each emergency, (c) a statement that the procedures apply to all employees who are operating at the emergency, (d) a requirement for initial training and annual refresher training in emergency operations and the incident management system, and (e) a requirement that the procedures shall be in accordance with the “two in/two out” rules as found in the

provision of 1910.134(g)(4), which was adopted by reference in the occupational health standard Part 451. "Respiratory Protection" being R325.60051 et seq. of the Michigan Administrative Code:

The fire department did not establish and implement written procedures for emergency operations, which include how and when a mayday call shall be executed.