

Case 208. 59-year-old male employee at a fruit storage facility died when he entered a controlled atmosphere storage room.

A 59-year-old male employee at a fruit storage facility died when he entered a controlled atmosphere (CA) storage room containing apples. Its atmosphere consisted of less than 3% oxygen. The storage room had a large outer door and an interior aluminum door, which was sealed with caulking and weather stripping. To maintain the atmosphere but still allow for visual observation of the produce, a 2-foot by 3-foot Plexiglas window was attached to the aluminum door by 18 bolts/wing nuts. The decedent removed the wing nuts and the Plexiglas window and climbed through the opening and entered the CA room. Another company employee found him collapsed on the floor next to a wood apple bin. A bag of apples was found next to his body. The company employee leaned through the opening into the CA room, grabbed the decedent by his coat, pulled him to the opening of the CA room, and checked for a pulse. He did not find a pulse. The company employee left the area to call the office to have them call for emergency response. Upon returning to the decedent, he took a deep breath, grasped the decedent under his arms and pulled him through the opening and out of the room. A bag of a different kind of apple was found on a forklift parked in the building. The company employee attempted CPR after he pulled the decedent out of the CA room but was unsuccessful in resuscitating him. Emergency response arrived and he was declared dead at the scene. The Plexiglas window was found leaning against a wall with the wing nuts nearby.

At the conclusion of its investigation, the MIOSHA General Industry Safety and Health Division issued the following Serious citations:

SERIOUS:

PERMIT-REQUIRED CONFINED SPACES, PART 490, RULE 1910.146(c)(4).
A written permit space program was not developed and implemented that complied with 1910.146 of Part 490.

Controlled atmosphere (CA) storage rooms. Specifically, a management official improperly entered CA room in an attempted rescue effort.

PERMIT-REQUIRED CONFINED SPACES, PART 490, RULE 1910.146(c)(1).
Evaluate the workplace to determine if any spaces are permit-required confined spaces.

SERIOUS:

HAZARD COMMUNICATION, PART 430, 1910.1200(e)(1).
A written hazard communication program was not developed, implemented, and/or maintained at the workplace which describes how the criteria specified in 1910.1200 (f), (g), and (h) will be met:

A hazard communication program was not developed or implemented for the facility where employees were exposed to oxygen deficient atmospheres with elevated nitrogen and carbon dioxide levels.

SERIOUS:

MICHIGAN OCCUPATIONAL SAFETY AND HEALTH ACT, ACT 154, P.A. 1974, AS AMENDED, SECTION 14j:

Signs that advised employees of the information and rights available to them regarding hazard communication under section 14 of the act were not posted throughout the workplace.

MICHIGAN OCCUPATIONAL SAFETY AND HEALTH ACT, ACT 154, P.A. 1974, AS AMENDED, SECTION 14j:

Pipes or piping systems in a workplace that contained a hazardous chemical were not identified to an employee by a label or by a sign, placard, written operating instructions, process sheet, batch ticket, or a substance identification system:

Pipe systems used to convey and generate the controlled atmosphere environment (i.e. nitrogen, and carbon dioxide) and refrigerant lines containing ammonia and Freon as well as propane are required to be labeled.