

**Case 515. 61-year-old laborer died when she was struck by a 262-inch-long cast iron pipe that fell approximately 15 feet from ceiling height.**

A 61-year-old female laborer died when she was struck by a 262-inch-long cast iron pipe that fell approximately 15 feet from ceiling height. The decedent was walking from her outside break location through a production area in the aisleway back to her work station. A pressurized (55-65 psi) overhead 6-inch diameter, 262-inch-long cast iron water pipe, elevated 15 feet near the ceiling level fell and struck her head. Approximately two months before the incident, a powered industrial truck struck the pipe, dislodging the hanger brackets from the I-beam ceiling, causing the pipe to sag and rest on some equipment racks. The MIOSHA investigation found that the racks were stored three high in this area leaving minimal clearance distance between the racks and the overhead piping and electrical systems. The lids for the racks popped open randomly due to their latch design when the powered industrial truck operators moved the racks. The employer had documentation regarding overhead pipe damage from the opening rack lids. Additionally, the firm had documented incidents of the powered industrial trucks striking the overhead pipes. The firm made repairs to the water line, raising the pipe back into position and re-attaching the clamps. Approximately two months after the repair, the decedent was returning from break and was walking through the area in the aisleway to return to her work location. The water pipe broke and fell approximately 15 feet, striking the decedent's head.

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

**Serious:** 408.1011(a): ACT 154, MICHIGAN OCCUPATIONAL SAFETY AND HEALTH ACT

An employer shall furnish to each employee, employment and a place of employment that is free from recognized hazards that are causing, or are likely to cause, death or serious physical harm to the employee.

The employer did not furnish employment and a place of employment which were free from recognized hazards that were causing or likely to cause death or serious physical harm to employees in that employees were exposed to the hazard of being struck by falling overhead airline piping and water pipes. The damage to the structural/mechanical integrity of the overhead piping systems was caused by multiple instances of powered industrial trucks striking the overhead piping and the lids on the *equipment* Racks inadvertently opening up and striking the overhead piping while being moved by powered industrial trucks. (*MIFACE removed the name of the racks*)

Among others, one feasible and acceptable method to correct this hazard includes, but is not limited to, establishing a structural/mechanical integrity program consisting of written procedures to maintain the integrity of the overhead piping system; train employees on the program to maintain the integrity of the overhead piping system; perform periodic inspection and testing of the structural/mechanical integrity of the overhead piping system, following recognized and generally accepted good engineering practices in these inspections; document that inspections have been done; and inspect and correct deficiencies with the overhead piping system in a timely manner when they have been struck. In addition, work with the owner of *equipment* Racks to prevent the lids from opening up inadvertently during transport and limit stacking of *equipment* Racks to no more than two high in the areas where the overhead piping system is present. (*MIFACE removed the name of the racks*)