

Case 346. 50-year old general construction laborer died when he was struck by a structural steel I-beam/guardrail assembly that fell from a flatbed trailer.

A 50-year old male general construction laborer died when he was struck by a structural steel I-beam/guardrail assembly that fell from a flatbed trailer. The decedent and a coworker from another contractor were in the process of removing the seven or eight tie down straps that had secured a load of five powder-coated steel I-beams, three of which had attached guardrails on a flatbed trailer. The trailer was parked at a bridge project the previous night. The steel had been loaded “standing up” to protect the powder coat. While standing on the ground, the decedent’s coworker started to loosen the tie down straps on one side of the flatbed trailer and decedent unloosened the straps on the opposite side. The coworker decided to get on the trailer bed to throw the straps to the other (decedent’s) side. The steel beam/guardrail assembly that struck the decedent weighed approximately 1,500 pounds. The I-beam was approximately 21 feet long, 14 inches tall with a flange that was 6-7/8 inches wide and 7/16 inches thick. Welded to the I-beam was a 6-inch by 6-inch piece of angle steel approximately 14 feet 4 inches long off the side of the flange. A steel guardrail was welded onto the angle steel and was approximately 4 feet tall. It consisted of a variety of 3-inch by 6-inch tube steel, 3-inch by 4-inch tube steel and 2-inch by 2-inch tube steel. The decedent was picking up the tie down straps that had just been removed from the load when the I-beam/guardrail assembly became unsteady and fell, striking him on his head and then pinning him at his midsection. The decedent was transported to a local hospital where he later died from his injuries. The decedent’s coworker fell off the truck. He was also struck by an I-beam and received a fractured ankle.

MIOSHA Construction Safety and Health Division issued the following alleged Serious citations to the employer at the conclusion of its investigation:

SERIOUS: GENERAL RULES, PART I, RULE 114(1):

An accident prevention program was not developed, maintained and coordinated with employees ---

Employee unstrapping a load of steel secured to a flatbed truck on a construction site without a developed accident prevention program. There were no instructions to the employee for inspection of the construction site to identify hazardous conditions or procedures to follow to eliminate the hazardous conditions. Employee was exposed to being struck by a load to top-heavy steel falling from the truck.

SERIOUS: PERSONAL PROTECTIVE EQUIPMENT, PART 6, RULE 622(1):

A helmet, as prescribed in R 408.40621, was not used to protect the employee where a hazard or risk of injury exists from falling or flying objects or particles or from other harmful contacts or exposures ---

Employee, unstrapping a load of steel secured to a flatbed truck, exposed to the top-heavy steel falling from the truck and striking the employee.