

Laborer Struck by Temporary Steel Shoring Tower Parts

INCIDENT FACTS

REPORT #: 71-200-2020s

REPORT DATE: October 9, 2020

INCIDENT DATE: October 24, 2019

VICTIM: 54 years old

INDUSTRY: General engineering contractors

OCCUPATION: Laborer

SCENE: Elevated light rail section under construction

EVENT TYPE: Struck by



A 54-year-old laborer died of injuries after he was struck by falling parts of a steel tower shoring system as he was dismantling it.

The laborer's employer was a general engineering contractor that was working on a light rail project.

On the day of the incident, the laborer was the lead worker. He and two other workers were disassembling steel tower frames of a temporary shoring system for forms that had been used to construct concrete pillars to support an elevated light rail line.

As the crew was working, they experienced a problem that prevented easy disassembly of two coupled steel frames. The two frames could not be separated due to the binding of steel pins used to connect the shore tower sections.

A member of the crew had been using a forklift to hold the frames upright. The laborer instructed him to move the forklift away from the frames.

The laborer then attempted to free the pins by using a sledgehammer to knock the pins out. After he hammered out the last pin, the two coupled 690-pound frame sections fell on him as he stepped into their path.

He was hospitalized with head injuries. He died four months later.

Investigators found that although the laborer had been trained by his employer, was provided with the shore tower manufacturer's instructions, and had access to company engineers and other knowledgeable employees for consultation on how to proceed safely, he chose to use an unsafe method to take apart the tower sections.

Safe methods of disassembling the shore tower parts would include the use of a forklift or crane to stabilize the shore tower parts while a worker removes the pins connecting the frames.



Photo 1. Incident scene beneath an elevated section of a light rail line under construction.



Photo 2. Two coupled steel tower frames that were part of a tower shoring system that fell on the laborer as he was disassembling it.



Photo 3. Incident scene shore tower section.



Photo 4. Example of shore towers provided by the manufacturer.

Recommendations

Workers must follow manufacturer's instructions for disassembly of shoring systems, and any supplemental instructions provided by the employer; such as a hazard assessment or on-the-job instructions, when specially prepared by the employer's mechanical and safety engineers.

This bulletin was developed to alert employers and employees of a tragic loss of life of a worker in Washington State and is based on preliminary data ONLY and does not represent final determinations regarding the nature of the incident or conclusions regarding the cause of the fatality.

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