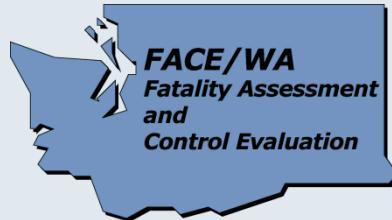


Deck Engineer on Barge Dies When Struck by Crane Counterweight in Washington State



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Washington State Department of
Labor & Industries



SUMMARY

The WA Fatality Assessment and Control Evaluation (FACE) Program has published a new Fatality Investigation report. These reports describe work-related fatal incidents and provide specific recommendations that may have prevented the incident from occurring. We hope that they are disseminated and used for formal or informal educational opportunities to help prevent similar incidents.

In June of 2010, a 26-year-old female deck engineer died when she was struck by the counterweight of a barge mounted crane/derrick. The deck engineer (victim) and a crane operator, both employees of a marine construction company, were working from a crane/derrick barge in support of a crew working at a job site on a project to replace pilings underneath a pier. The project involved having divers in the water and workers in small boats taking out the old pilings and replacing them with new ones. The crane operator on the crane/derrick barge would operate the crane to lift waste pilings from the water and place them on an adjacent barge and lift new pilings and other supplies to workers in the water.

The victim was an apprentice heavy duty repair mechanic and an inexperienced deck engineer who had worked in the company shop for the past 10 months; this was her third day on the job as a deck engineer. She was welding repairs to a guard railing on the barge's upper deck when the crane operator rotated the crane to make a pick of pilings from the water. The crane's counterweight struck her in the head and neck, pinning her against the railing.

A bystander on the pier alerted company employees that she was hurt. An employee went to check on the victim and found her unresponsive. Another employee called emergency medical services (EMS). As an employee was applying an Automated External Defibrillator (AED) to the victim, EMS personnel arrived and began CPR. She was then removed from the barge and taken to a hospital where she was declared dead.

RECOMMENDATIONS

To prevent similar occurrences in the future, the Washington State Fatality Assessment and Control Evaluation (FACE) investigation team recommends that employers who use cranes should follow these guidelines:

- **Ensure that the area within the swing radius of the rotating superstructure of a crane is barricaded so as to prevent workers from entering and being struck.**
- **Ensure that a method of communication is established and that communication is maintained between the crane operator and other workers and that the crane and its superstructure do not move until the “all clear” signal is given.**
- **Lock out/tag out the crane when workers need to perform work that will expose them to the hazard of being struck by the crane or its load.**
- **Train employees performing work in a crane’s vicinity or in support of the crane operator to recognize and avoid the hazard of being struck by the rotating crane superstructure and its counterweight.**
- **Hold a daily pre-work safety meeting to break down each task and identify the potential hazards so that the site supervisor, crane operator, and work crew are all aware of the hazards and safe working practices when performing their tasks.**
- **Consider having an experienced employee work alongside a new or inexperienced employee so as to provide on the job training on how to work safely in a potentially hazardous environment.**
- **Consider installing electronic proximity sensing devices to warn the crane operator of workers on foot in the vicinity.**

To access the full version of this investigation report along with the detailed recommendations and discussions section, go to www.lni.wa.gov and enter **52-24-2012** into the search box.