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SECTION II: FALLS/DROWNING ACCIDENTS
Summary No. 4 - Working Aboard A Barge Or Tugboat

Hazard

Employees working aboard barges and tugboats were exposed to the hazard of drowning.

Process

A crane barge and a tugboat were moored at a dock in preparation for towing.

Activity at time of incident:
The deckhand/watchman was apparently aboard either a crane barge or the adjacent tugboat when he fell overboard.

Incident Description

Setting:
A crane barge and tugboat are moored alongside a dock at a gravel yard. A single employee works the night shift (7 p.m. to 7 a.m.) as the deckhand/watchman for the barge and tugboat.

Incident:
The deckhand/watchman apparently fell from either the barge or the tugboat and drowned. His body was later found in a different location on the river. There were no eye witnesses to the incident.

Relevant Factors:
The victim was not wearing a life vest at the time his body was discovered three weeks after he disappeared. He was found to be wearing penny loafers, which do not provide appropriate protection for work aboard vessels. Additionally, the victim was believed to be drunk at the time of the incident. The autopsy report indicated that acute alcohol intoxication was a "contributory factor" in the drowning based on a finding of a blood alcohol level of 0.12 percent.

The employer failed to ensure that employees wore life vests when working in locations presenting drowning hazards. The employer also failed to perform safety inspections to ensure that employees routinely wore the required personal protective equipment.

Numerous safety hazards were present at the site. Of the 11 personal flotation devices on site, 9 were defective. Some of the life vests were torn and many had broken straps. One life ring was frayed and worn, and of the required 90 feet of line only 40 ft of line was attached to either of the two available life rings. There was no blanket or other suitable covering available for emergency procedures within the barge area, but there was a stretcher on the barge. The employer did not ensure that all employees exposed to impact, falling objects, or punctures were wearing safety shoes. No employee was trained in first aid and the first aid kit was inadequately stocked. An aluminum rescue boat on the barge had holes in the bottom that could cause the boat to leak and sink. The generator on the crane barge was inadequately guarded. Two ladders used for climbing in and out of the barges were in poor condition (bent bottom step and cracked side rails) and should have been taken out of service. Deficiencies in hazard communication training and material safety data sheets were also found. Poor housekeeping, indicated by piles of rags littering the tugboat's generator room and saturated with motor oil, was noted.

Applicable Standards and Control Measures

- 29 CFR 1918.105(b)(1): Other protective measures - Personal flotation devices (PFDs). "The employer shall provide and require the wearing of PFDs for each employee engaged in work in which the employee might fall into the water."
- 29 CFR 1918.105(b)(3): Other protective measures - Personal flotation devices (PFDs). "Personal flotation devices shall be maintained in safe condition and shall be considered unserviceable when damaged in a manner that affects buoyancy or fastening capability."

Although there were no witnesses to the incident, this fatality may have been prevented if the employer had required and ensured the use of life vests by all employees exposed to drowning hazards. Additionally, the hazard could have been prevented if the employer had performed random safety checks of the night watchman to ensure that he was routinely wearing a life vest in good condition.

Other Relevant Standards and/or Control Measures

A written safety program should be implemented which includes: hazards assessments; a hazardous communication program; safety training meetings; first aid training; requirements for PPE; and the monitoring of employee performance or work habits at the barge unloading area.

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