A Boat Maintenance Crew Supervisor Dies of Carbon Monoxide Poisoning While Using a Gasoline-Powered Pressure Washer While Removing Pump

SUMMARY

On May 17, 2012, a 25-year-old boat maintenance crew supervisor died from carbon monoxide poisoning while using a gasoline-powered pressure washer to strip paint from a boat.

On the day of the incident, he was supervising a crew using a pressure washer and disc grinders to remove old paint from the exterior of a 162-foot steel hulled fishing boat moored at a dock. The six crew members were working on the boat in different areas that were covered with plastic tarps in order to prevent paint chips and dust from entering the water.

At the start of the day, the gasoline-powered pressure washer was positioned on the dock. Later, employees of another contractor moved the pressure washer onto the boat to clear the way for supply deliveries. Shortly before the end of the work day, the victim moved the pressure washer onto a side deck passageway that was fully enclosed by plastic tarps. Working alone, he used the pressure washer for about 20 minutes.

A co-worker went to look for the victim and found him unconscious on top of the pressure washer. Emergency responders arrived and determined that the victim was deceased. The medical examiner reported the cause of death as “carbon monoxide intoxication due to inhalation of engine exhaust.”

RECOMMENDATIONS

Washington State Fatality Assessment and Control Evaluation (FACE) investigators concluded that to protect employees from the hazard of carbon monoxide (CO) poisoning from small gasoline-powered engines and tools, employers should:

- Ensure that gasoline-powered pressure washers or other fuel-powered tools are not used in enclosed or partially enclosed areas where CO can build up.
- Train employees on the hazards, sources, symptoms, and control of CO exposure from fuel-powered equipment and tools.
- Ensure that personal CO detectors equipped with audible alarms are used by employees when working with small gasoline-powered engines in locations where CO may build up.
- Coordinate work activities at job sites where there are multiple contractors and their employees to ensure safe work.
- Ensure that CO safety warning labels are attached to pressure washers and that they are replaced when no longer readable.
- Consider using alternatives to fuel powered equipment and tools.

SHARP Publication # 52-44-2018_summary. The full version of this investigation report, along with the detailed recommendations and discussions section, can be found at: www.lni.wa.gov/Safety/Research/Face/Files/BoatMaintenanceWorkerCOPoisoning.pdf

The Washington State Fatality Assessment and Control (WA FACE) program is one of many workplace health and safety programs administered by the Washington State Department of Labor & Industries’ Safety & Health & Research for Prevention (SHARP) program. It is a research program designed to identify and study fatal occupational injuries. Under a cooperative agreement with the National Institute for Occupational Safety and Health (NIOSH grant# 2U60OH008487), WA FACE collects information on occupational fatalities in WA State and targets specific types of fatalities for evaluation. More information about WA FACE can be found at www.lni.wa.gov/Safety/Research/FACE.