

MNM Fatal 2012-05

- Falling Material Accident
- April 11, 2012 (North Carolina)
- Sand & Gravel Operation
- Equipment Operator
- 48 years old
- 8 years of experience

Overview

The victim was injured when the counterweight from an excavator fell and struck him. He and the Plant Manager were removing bolts from the counterweight in preparation to move the excavator to another mine site. Following the removal of the last of six bolts, the counterweight dropped to the ground. The victim was hospitalized and died on April 12, 2012, as a result of his injuries.

The excavator was purchased about four to five weeks prior to the accident. On the day of the accident, it was to be transported to another mine, owned by the same operator. Due to weight restrictions on the highways, the counterweight had to be removed prior to shipping. The excavator was purchased with an optional hydraulic assist cylinder that allows the counterweight to be removed and reassembled easily and safely.

The accident occurred due to management's failure to follow the manufacturer's procedures for removing the counterweight from the excavator. The excavator was equipped with a hydraulic system that secures and lowers the heavy counterweight to the ground safely; however, this system was not used on the day of the accident. Raised components were not secured to prevent accidental lowering when persons were working on or around mobile equipment and exposed to the hazards of accidental lowering of the component. The victim did not receive task training regarding the procedures to be followed in the health and safety aspects of the task before performing the new task.



Root Cause

Root Cause: Management did not follow the manufacturer's procedures for removing the counterweight from the excavator. Raised components were not secured to prevent accidental lowering when persons were working on or around mobile equipment and exposed to the hazards of accidental lowering of the component. The victim did not receive task training regarding the procedures to be followed in the health and safety aspects of the new task before performing the new task.

Corrective Action: Management established procedures and controls to ensure persons can remove a counterweight from an excavator safely. The procedures include following the manufacturer's procedures when removing a counterweight. The mine operator will provide adequate task training in the health and safety aspects of the task to all miners before performing any new task.

Best Practices

- Before working on or near equipment, establish safe work procedures consistent with the design of the machine. Train all persons to recognize and understand these procedures.
- Follow the equipment manufacturer's procedures for the work being performed to ensure that all hazards are addressed.
- Provide adequate task training to persons assigned to perform the work. Utilize assistance from the manufacturer when the equipment incorporates new technology and features.
- Install blocking materials before removing mounting bolts from machinery components which can fall during disassembly.