

MNM Fatal 2013-04

- Falling Material Accident
- April 4, 2013 (Arizona)
- Copper Operation
- Contract General Foreman
- 30 years old
- 6 years of experience

Overview

The victim was killed when a suspended 40-foot long section of 36-inch diameter steel pipe fell and struck him. An excavator was being used to position the pipe to connect it to another section of pipe. The pipe, attached to the excavator by a lifting strap, shifted and fell on the victim. The pipe was being installed as part of a new system to flow waste water from the flotation tanks back to a new impoundment.

The accident occurred due to contractor management's failure to identify the risks associated with the task of installing the pipe. The contractor had established policies and procedures; however, management failed to follow them. Additionally, the victim had not received task training before installing the pipe. He was working under a suspended load when the load shifted and fell on him.



Root Cause

Root Cause: Contractor management failed to follow the policies and procedures that had been established to install the pipe. The problems installing the pipe were not properly addressed. Contractor management also failed to ensure that all persons working on the pipe project had received the proper task training prior to starting work on this project.

Corrective Action: Contractor management developed a Master Task Plan to ensure all safety items regarding the pipe installation have been addressed. This plan requires that trained and qualified personnel will install the remaining pipe. Engineered metal supports will be used to hold up the spigot end of a pipe while it is inserted into the bell end of the adjacent pipe and all the pipe joints will be tack welded prior to moving to the next section of pipe to be installed.

Contractor management had a pipe support designed and engineered to prevent persons from working under a suspended load when putting together spigot and bell end 36 inch pipe. This pipe support will prevent the pipe from falling or rolling side to side.

A task training program regarding these new procedures for handling 36-inch spigot and bell pipe design was established. All persons assigned to work on the pipe project have received the task training. Any new persons assigned to work on the pipe project will receive this training.

Best Practices

- Establish and discuss safe work procedures. Identify and control all hazards associated with the work to be performed along with the methods to properly protect persons.
- Task train all persons to recognize all potential hazardous conditions and to understand safe job procedures for elimination of the hazards before beginning work.
- Attach taglines to loads that may require steadying or guidance while suspended.
- Securely block equipment against hazardous motion to ensure energy cannot be released while performing work.
- Never work in the fall path of objects/materials of massive weights having the potential of becoming off-balanced while in a raised position.
- Implement measures to ensure persons are properly positioned and protected from hazards while performing a task.
- Monitor personnel routinely to determine that safe work procedures are followed.