

MNMM Fatal 2004-09

- Powered Haulage Accident
- May 27, 2004 (Michigan)
- Sand & Gravel Operation
- Truck Driver
- 37 years old
- 4 years experience

Overview

- The victim was preparing a portable crusher for shipment but was not aware of the hazards associated with the task. He was removing the lock pins from two diagonal support members of a discharge conveyor to raise it to a vertical position. The conveyor was being raised by a rubber-tired front-end loader with a 15-foot-long jib pole attached to the loader bucket.

Overview

- The loader applied an excessive force to the conveyor resulting in the failure of one bolt, deformation of the plates, and the failure of the weld. This action caused the discharge conveyor to suddenly rotate upward. The victim was standing in the area above the discharge conveyor and was struck in the chest by the drive motor.



Cedarapids Model No. 1313 crusher/screening plant
Discharge conveyor (close up of motor side)



Discharge conveyor (side view of motor side)

Why Did Accident Occur?

- The victim was not aware of the hazards associated with removing the lock pins from the two diagonal support members of a discharge conveyer.

Front-end loader with jib pole attached





Close up of upper splice connection and pivot point - discharge conveyor (side opposite motor). Note: Square structural tubing pulled out of larger square tubing coupling



Damaged support arm for discharge conveyor (motor side)
Note: Broken weld, bent plate, and missing bolt.

Causal Factors

- The victim was standing on the conveyor to remove the lock pins of a conveyor while the hinged section of the conveyor was being hoisted with a jib pole mounted to a rubber-tired front-end loader bucket.
- The victim and co-workers had not received new task training before they began to work.
- The loader operator's view of the victim and the conveyor was blocked by the loader bucket.

Best Practices

- Ensure that mobile equipment is used according to the manufacturer's recommendations.
- Establish safe work procedures, train all personnel, and ensure that employees understand the hazards and safe work procedures before beginning any work.
- Position employees to prevent them from being exposed to hazards.
- Examine work areas before and during the shift for hazards that may be created as a result of the work being performed.
- Monitor personnel routinely to determine that safe work procedures are followed.