

# MNMF Fatal 2014-22

- Powered Haulage
- November 25, 2014 (Pennsylvania)
- Sandstone Mine
- Truck Driver
- 67 years old
- 10½ years of experience

# Overview

The victim was killed while operating a haul truck. He backed the haul truck to the edge of an overburden dumpsite and started to raise the truck's bed to dump a load of material. The bank failed, causing the truck to overturn and fall 30 feet below.

The accident occurred due to management's failure to ensure examinations were conducted periodically at the dumping location throughout the shift as changing conditions warranted. Management also failed to ensure that loads were dumped a safe distance back from the undercut edge of the overburden stockpile.

An excavator removed material from the toe area of the overburden stockpile as material was being dumped from the haul truck at the top. Removing material from the pile steepened the slope angle from 30 to 39 degrees, creating an unstable condition at the dump site. The loaded haul truck backed very close to the edge of the overburden stockpile where the weight from the truck caused a localized failure and loss of ground under the back wheels of the loaded truck. As the rear of the truck dropped, the downward and lateral momentum caused it to flip over onto the cab, landing approximately 30 feet down the slope of the overburden stockpile.



# Root Causes

- **Root Cause:** Management failed to inspect the dumping location periodically throughout the shift as changing conditions warranted. Material had been loaded from the stockpile directly below the dump location which steepened the slope angle and reduced the stability.
- **Corrective Action:** Management established policies and procedures to ensure that dumping locations are inspected at the beginning of the shift and during mining operations for signs of slope instability. The top of the dump area is to be examined for cracks, unstable ground, and sunken or soft areas. The load-out area is to be examined for signs of undercutting and over steepening of the slope. All mobile equipment operators were trained in these new policies and procedures.

# Root Causes

- **Root Cause:** Management failed to ensure that loads were dumped a safe distance back from the undercut edge of the overburden stockpile.
- **Corrective Action:** Management established policies and procedures to ensure that loads are dumped a safe distance back from the edge of the overburden stockpile. A front-end loader will be used to push the material over the edge. No material will be dumped over the edge while material is being removed from the toe of the stockpile. All mobile equipment operators were trained in these new policies and procedures.

# Best Practices

- Task train all persons to understand safe job procedures.
- Establish and discuss safe work procedures before beginning work.
- Identify and control all hazards associated with the work to be performed.
- Conduct adequate pre-operational checks prior to operating mobile equipment.
- Always wear a seat belt when operating self-propelled mobile equipment.
- Examine dumping locations for stability prior to dumping the first load and as ground conditions warrant during the work shift. Where trucks are loaded out of the stockpile or ground conditions may fail to support the weight of the truck, dump loads a safe distance back from the edge.
- Maintain berms or similar impeding devices at dumping locations where there is a hazard of overtravel or overturning.
- Travel in a straight line when backing a truck toward a dump location. Do not approach on a turn.
- Monitor persons routinely to determine safe work procedures are followed.