



Division of Mineral Mining

Accident Investigation: Mobile Equipment Accident May 15, 2002

The drive shaft of a Euclid R-65 haul truck broke as the vehicle approached the ramp to the mine's gyratory crusher. After the drive shaft broke, the truck traveled approximately 0.3-mile under momentum force before the driver stopped the truck near the bottom of the elevated quarry ramp. The driver then shut off the engine to investigate the mechanical problem, which resulted in a loss of power to the truck's hydraulic brake system. The truck then rolled down the quarry ramp and overturned. There were no serious injuries as a result of this accident.

RECOMMENDATIONS: To avoid the occurrence of a similar accident, the following safeguards should be implemented:

- Task training should address loss of power to brakes when engine is shut down as specified in a vehicle's users manual.
- Truck drivers should be trained in proper emergency procedures to be used in the event of sudden mechanical failure.
- During the required "pre-operational inspection," drivers should ensure that the vehicle has a sufficient quantity of fuel to avoid fuel starvation and subsequent engine shut-down.
- Mechanics should inspect brake hydraulic lines, drive shaft, and yoke assemblies on a periodic basis and replace worn parts as needed.
- Avoid stopping on quarry ramps.



The Virginia Department of Mines, Minerals & Energy's Division of Mineral Mining safety and health regulations establish minimum safeguards for mobile equipment used at mineral mines; however, sudden and unexpected mechanical failures can and do occur. Accidents and injuries associated with these accidents often can be avoided by routine maintenance, and proper operational and emergency response training!