

# MNM Fatal 2011-11

- Other Accident
- October 28, 2011 (Nevada)
- Gold Operation
- Contract Tire Repair Technician
- 21 years old
- 39 weeks of experience

# Overview

The victim was killed while repairing a haul truck tire in a tire repair shop. He was inside the large tire, completely out of view, repairing a damaged section in the tire's side wall. While applying glue to the interior area of the tire, he was overcome by trichloroethylene vapors. He was inside the large tire, completely out of view, repairing a damaged section in the tire's side wall. While applying glue to the interior area of the tire, he was overcome by trichloroethylene vapors in the glue.

The accident occurred due to mine and contract management's failure to provide adequate procedures and controls to protect persons working with toxic chemicals. Management failed to install proper engineering controls to control chemical vapors in the work area, provide appropriate respiratory protection, and conduct surveys verifying the adequacy of controls. The victim did not receive instruction in the safety and health aspects and safe work procedures of the task of repairing tires using trichloroethylene glue. He was assigned to perform this task alone, using a hazardous chemical inside a tire, where he was unable to communicate, be heard, or be seen by others after he was overcome by the vapors.



# Root Cause

**Root Cause:** Mine and contract management failed to establish procedures and controls to safely repair haul truck tires using glues containing trichloroethylene, a toxic chemical. Exposure to trichloroethylene was not controlled through ventilation or the use of appropriate respiratory protective equipment, surveys were not conducted to verify the adequacy of controls, proper task training was not provided to persons performing this work, and persons were assigned to perform this task alone.

**Corrective Action:** Mine and contract management established procedures and controls for persons to safely repair haul truck tires. Exposures to hazardous chemicals are controlled through local ventilation, surveys are conducted verifying the adequacy of controls, and task training is provided to persons assigned to perform this work. A policy implemented by management requires persons not to work alone while repairing tires.

# Best Practices

- Develop, implement, and maintain a written Hazard Communication (HazCom) program.
- Ensure that a Material Safety Data Sheet (MSDS) is accessible to persons for each hazardous chemical to which they may be exposed.
- Review and discuss MSDS control section recommendations. Establish and discuss safe work procedures before starting any work and identify and control all hazards.
- Train all persons to recognize and understand safe job procedures, including the physical and health hazards of chemicals that are being used and the proper use of respiratory protection.
- Ensure that adequate exhaust ventilation is provided to all work areas.
- Ensure that persons are not required to perform work alone in any area where hazardous conditions exist that would endanger their safety.