

FATALGRAM

ALASKA DEPARTMENT OF LABOR AND WORKFORCE DEVELOPMENT

Date of Accident: June 28, 2003

An apprentice mechanic was killed instantly when he was struck by several pieces of a multi-piece demountable rim wheel he was attempting to mount onto a dump truck.

Description of Accident: An apprentice mechanic was killed instantly when he was struck by several pieces of a multi-piece demountable rim wheel he was attempting to mount onto a dump truck. This type of rim, commonly referred to as a "split rim," is composed of three pieces held together by the design of the pieces when properly fitted together and the pressure of the inflated tire.

The cause of the accident was attributed to three separate circumstances:

- failure of the apprentice mechanic, his supervisor and the employer to recognize that the rim components were severely corroded and deformed,
- failure on the part of the victim to follow published procedures when tightening lug nuts on that specific type of rim, and
- the lack of a viable training program on the maintenance and mounting of "split-rim" wheels.

ACCIDENT PREVENTION RECOMMENDATIONS:

- Employer must establish a safe operating procedure for servicing multi-piece rims and ensure that employees are instructed in and follow the procedures. The employer must document the employee training, perform regular site evaluations and document disciplinary action as a result of procedural violations.
- The tire shall be inflated inside a restraining device.
- Employees shall not remain in the trajectory path even if using a remote control inflation device (this must be included in procedures).
- Cracked, broken, corroded, bent or damaged rim components shall not be used or repaired for use (welded, brazed or otherwise heated).
- After inflation, the tire and wheel components shall be inspected while still in the restraining device to make sure they are properly seated and locked.
- An employer should have a written safety program which includes enforcement and discipline procedures to ensure that employees follow the employer's safety requirements. The employer should take steps to discover employee violations and document disciplinary action taken.