

## Why you do a daily, visual walk around – with a checklist...

**The accident:** It was a mild spring day in Tennessee, when a veteran heavy equipment operator climbed aboard his dozer and began pushing shale rock into stockpiles. The owner of the equipment was also working nearby, picking up the shale with a wheel loader and placing it in dump trucks for removal. Although functional, the dozer was almost 40 years old.

After lunch, the dozer operator resumed work, but unable to loosen any shale from an embankment, he put the dozer into reverse. After backing up approximately 6 feet, a hydraulic line on the left side of the dozer burst, spraying hot hydraulic fluid across the exhaust manifold.

Moments later, flames engulfed the operator. The hydraulic fluid continued to spray from the leaking hose. The owner described it as looking like a blow torch -- with fire shooting out of the engine and back toward the open (ROPS-style) cab.

The operator jumped out of the cab with his clothes on fire. The owner got off his wheel loader and ran to the operator, rolling him on the ground and raking dirt over him to extinguish the flames. An ambulance was called and the victim was taken to a nearby hospital, but he died the next day. The owner of the equipment also suffered burns after attempting to shut off the dozer, and remained hospitalized for six weeks.

### Cause of the accident

Tennessee OSHA (TOSHA) identified the source of the fire as a ruptured hydraulic hose in an assembly that powered the dozer's lift cylinder. The assembly was



Illustration by Don Lomax

approximately 10 inches from the engine compartment.

Six years earlier, the manufacturer of this dozer sent owners a service letter indicating that the design of the hose routing on this model could result in excessive abrasion and recommended a modification. However, the owner of the dozer did not act on the information or take corrective action. TOSHA concluded that the hose failed just 2 inches away from the area identified in the service letter.

Although this company had been in business for 55 years, its operators were left to perform their own equipment inspections. The company did not use checklists or train operators how to observe potential problems. The company did not have a written safety program or any safety training documentation.

### Prevention

**1.** This accident might have been prevented had the owner trained his operators on daily walk-around

inspections and used a safety checklist. A thorough inspection takes no more than 10 minutes, yet would have caught a bulge in the hydraulic hose, leaks or excessive abrasion. Defective components or equipment should have been removed from service until the necessary repairs were made.

**2.** Recommendations in OEM service letters and technical bulletins should always be followed, and the information therein should be passed on to operators and field supervisors.

**3.** Employers should designate a supervisor (or a trained competent worker) to ensure that daily, pre-shift equipment checks are completed, corrective actions are verified and that records of those repairs are maintained.

**4.** Employers should develop, implement and enforce a comprehensive written safety and health program for all workers, including training in hazard recognition and the avoidance of unsafe working conditions.

NIOSH In-house FACE Report 2006-05. For more information, go to [www.cdc.gov/niosh/face/in-house/full200605.html](http://www.cdc.gov/niosh/face/in-house/full200605.html).

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 Attending: \_\_\_\_\_

