Date Wed, 05 Apr 2000 144614 -0600
From Meredith Brown racer@lanl.gov
Subject- Blue Alert- Injury Due to Truck Lift Gate Malfunction

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Date 12/23/1999 Identifier INEEL-1999-481

Lessons Learned Statement- Due to the way truck lift gates are used (and sometimes abused), they should be periodically inspected and repaired as necessary. Lift gate operators should call Fleet Maintenance whenever a lift gate fails to operate as designed.

Discussion of Activities- During routine operations, a supervisor, equipment operator, and two electricians were evaluating a safety concern in regards to the lift gate on the rear of a truck. The equipment operator operated the lift gate for the electricians who were trying to determine what kind of remote operator they could install that would allow the equipment (the lift gate) to be operated by an equipment operator without having to use the fixed manual control lever. The control lever that operates the lift gate up and down is located on the truck such that when an operator is loading/unloading equipment he/she must use their foot to operate the lever, because they are using their hands to balance/hold the equipment in an upright position. During the operation of the lift gate, it jammed in the up position, without engaging the retaining (locking) mechanism. The equipment operator stated that this had happened in the past. He went to the cab of the truck, locked out the lift gate electrically, and retrieved a lug nut wrench. He inserted the lug nut wrench between the locking mechanism and the bed of the truck and lifted up on the wrench. The locking mechanism on the truck freed and came up against the wrench, pinning the equipment operator's left little finger between the wrench and the bed of the truck. The equipment operator suffered a fractured finger, was transported to the dispensary. The truck was taken out of service and sent to the shop for repairs. The lift gate's actuator rod was straightened and the electrical system's wear points were adjusted. The lift gate's moving parts and pivot points were lubricated and the truck was returned to service. Other trucks with a lift gate were scheduled for inspection and a tailgate training session was held for equipment operators and yardmen. Discussions with Fleet Maintenance personnel identified that in addition to normal wear, abuse is a contributing factor to many of the problems involving lift gates. Problems can result due to overloading the lift gate, driving the vehicle with the gate unfolded/unlatched, backing the vehicle into loading docks too hard, and personnel jumping onto the gates.

Recommended Actions- Those persons responsible for vehicle that have lift gate and their safe operation should consider implementing the following actions.

- Require periodic inspections of lift gates.

- Instruct lift gate operators not to attempt repairs to faulty lift gates; but instead, have them declare the lift gate out of service until it can be repaired by shop personnel.

- Remind operators periodically that the way they operate/use their lift gate can have a direct effect on how often repairs are required.

- Consider installing a remote switch that will allow operators to lift/lower the gate from a position where they can better hold/balance the equipment being moved.

Priority Descriptor Blue
Work/Function(s) Maintenance - Vehicles
User-Defined Functional Category Maintenance, Operations, Safety, Management
Hazard(s) Personal Injury - Mechanical Injury (Striking/Crushing)
ISM Core Function(s) Analyze Hazards
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