

tannery foreman to establish an error-free exchange of information required to accomplish the safe transfer of the cargo from the vehicle into a plant storage tank. The likelihood of this failure was increased by the absence of instructions or training in information validation procedures to be followed during such exchanges, and by the absence of markings, devices, or other measures on the vehicle or tannery property which would have permitted such validation to be made unilaterally by either party.

VI. RECOMMENDATIONS

The National Transportation Safety Board recommends that:

1. The Department of Transportation, with the participation of the Department of Labor and, if required, the Interstate Commerce Commission, conduct a comprehensive investigation into the risks associated with the delivery of bulk liquid cargoes from motor carrier vehicles, and initiate the implementation of risk-reduction measures. 71-65

2. The National Tank Truck Carriers, Inc., the Private Truck Council of America, Inc., and State trucking associations, pending implementation of the above recommendation, call their members' attention to the risks associated with communications failures during bulk liquid deliveries from motor carrier vehicles, and to the

need, demonstrated in this accident, for development of, training in, and enforcement of procedures which incorporate information validation techniques to be used during such deliveries. 66

3. The Department of Labor and the agencies having jurisdiction in each State, pending implementation of recommendation No. 1, consider the establishment of rules, regulations, or standards which require the display of the name of the material to be delivered into each fill line connection at these connections in all facilities where bulk liquid materials are delivered from a motor carrier vehicle, similar to the rules adopted by the Maine Department of Labor and Industry after this accident. 67

4. The Department of Labor and the agencies having jurisdiction in each State consider developing and implementing requirements which would reduce the risks to employees and carrier personnel in the event of accidental mixing of incompatible bulk liquid materials at all locations where such materials are delivered by motor carrier vehicles. 68

5. The Department of Transportation initiate rulemaking action to amend 49 CFR 394 to require all carriers to report accidents occurring in connection with the delivery of bulk liquid materials from motor carrier vehicles, whether or not the carrier's employees, vehicle, or cargo suffered damages in the accident. 69

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

/s/ JOHN H. REED
Chairman

/s/ OSCAR M. LAUREL
Member

/s/ LOUIS M. THAYER
Member

/s/ ISABEL A. BURGESS
Member

Francis H. McAdams, Member, was absent, not voting.