National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: OCT 1, 1999
In Reply Refer to: H-99-65

Mr. Dewey Glower
President
National Association of Truck Stop Operators
499 South Capitol Street, SW, Suite 502
Washington, D.C. 20003

On August 9, 1998, about 12:53 a.m., a Premium Tank Lines, Inc., (Premium) truckdriver was transferring gasoline from a cargo tank to the underground storage tanks at a Fast Lane gasoline station-convenience store in Biloxi, Mississippi, when an underground storage tank containing gasoline overflowed. An estimated 550 gallons of gasoline flowed from the storage tank, across the station lot into the adjacent highway, and through a nearby intersection. The gasoline ignited, and fire engulfed three vehicles near the intersection, which ultimately resulted in the deaths of five occupants and the serious injury of one. Damages were estimated at $55,000.[1]

From its investigation, the National Transportation Safety Board determined that the probable cause of the accident resulted, in part, from the carrier's lack of adequate procedures for dispatching delivery drivers to customer facilities. The Safety Board also found that the failure of the facility owner, R.R. Morrison and Son, Inc., (Morrison) to have adequate safety procedures for accepting product offered for delivery at its Fast Lane stations contributed to the accident.

Premium's truckdrivers obtained their assignments by telephoning the company dispatcher and orally receiving a list of delivery locations and the number of gallons to be delivered to each site. In this case, a miscommunication between the dispatcher and the truckdriver resulted in the driver going to the wrong station.

When the Premium cargo tank truck arrived at the Fast Lane station, the truckdriver did not present the bill of lading to the Fast Lane employees before beginning the gasoline transfer. The truckdriver took inch readings in the premium unleaded tank, but initially could not take measurements in the regular unleaded direct fill port because

[1] For more information, read *Overflow of Gasoline and Fire at a Service Station-Convenience Store, Biloxi, Mississippi, August 9, 1998*, Hazardous Materials Accident Report, NTSB/HMZ-99/02 (Washington, D.C.: National Transportation Safety Board, 1999).

his access was blocked by a parked vehicle. He then went into the convenience store to ask the station employees for an inventory printout from the computerized monitoring system. A station employee merely generated the printout for the driver. No Fast Lane employee compared the amount of gasoline scheduled for delivery with the amount that the station's monitoring system indicated was in the underground tanks to determine whether the quantity intended for delivery would fit in the underground tanks; such a comparison, in this case, could have prevented the overfill.

The automatic monitoring system at the Fast Lane station had a feature that sounded an alarm inside the convenience store for a number of reasons, including when an underground storage tank reached 90-percent capacity. The station's assistant manager said that she typically heard the alarm about twice a month when deliveries were made. She indicated that, over the months, she had become accustomed to the alarm sound and usually did not respond to it any longer.

A Morrison official stated that the company trained its station employees to use the automatic monitoring system primarily to complete inventory and other paperwork. Employees did not receive any specific training for monitoring gasoline transfer or responding to overfill alarms. Morrison officials stated that, because of their delivery agreement with Premium, they considered the carrier responsible for determining whether the volume of cargo being delivered would fit in the underground tanks.

The Safety Board is concerned by this attitude. The Environmental Protection Agency (EPA) requires that station owners and operators ensure that a transfer operation is monitored and that underground storage tanks have available space for the gasoline being delivered. Federal regulations at 40 *Code of Federal Regulations* 280.30, "Spill and Overfill Control," stipulates:

> Owners and operators must ensure that releases due to spilling or overfilling do not occur. The owner and operator must ensure that the volume available in the [underground storage] tank is greater than the volume of product to be transferred to the tank before the transfer is made and that the transfer operation is monitored constantly to prevent overfilling and spilling.

In its analysis of this rule, the EPA takes the position that the owner of the underground storage system is responsible for any release. Under "Spill and Overfill Prevention and Control," the EPA states:

> Although EPA agrees that responsible carriers are the primary agents in the field to prevent spills and overfills, for the purpose of complying with today's requirements, the UST [underground storage tank] system owner and operator is responsible for preventing spills and overfills. The agency must take this approach because it has no legal authority to regulate transporters under Subtitle I. Thus, regardless of whether the owner and operator decides to share (by contract) responsibility for the monitoring of

the transfer with the carrier, under today's final regulations the owner and operator will continue to be responsible in the event that there is a release during delivery.

The safest and most effective way to ensure that underground storage tanks have available space for the amount of gasoline being delivered is for station employees to work with truckdrivers.

The National Transportation Safety Board therefore recommends that the National Association of Truck Stop Operators:

> Inform your members of the facts and circumstances of the August 9, 1998, accident in Biloxi, Mississippi, and urge them to review their procedures and, if necessary, to revise them to require that station employees verify that underground storage tanks have sufficient capacity for gasoline or other petroleum products offered for delivery and to monitor such transfers so that overfills do not occur. (H-99-65)

Also, the Safety Board issued safety recommendations to the Federal Highway Administration, the Research and Special Programs Administration, the Environmental Protection Agency, Premium Tank Lines, Inc., R.R. Morrison and Son, Inc., the American Petroleum Institute, the National Tank Truck Carriers, the National Association of Convenience Stores, the Petroleum Marketers Association of America, the Service Station Dealers of America, and the Society of Independent Gasoline Marketers of America.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is interested in any action taken as a result of its safety recommendations. Therefore, it would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation H-99-65 in your reply. If you have any questions, you may call (202) 314-6678.

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT, GOGLIA, and BLACK concurred in this recommendation.

Original Signed

By: Jim Hall
Chairman