

Lay H-561E



National Transportation Safety Board

Washington, D.C. 20594
Safety Recommendation

Date: October 15, 1991

In reply refer to: H-91-38

Mr. William B. O'Morrow
President
Calzona Tankways, Inc.
Post Office Box 6550
Phoenix, Arizona 85005

About 3 a.m. Pacific standard time on February 13, 1991, a tractor-semitrailer (cargo tank) overturned as the vehicle was traveling on a main urban roadway in Carmichael, California.¹ At the time of the accident, the cargo tank contained about 8,800 gallons of automotive gasoline that was being transported by intrastate delivery to a service station. Gasoline from the cargo tank spilled into a nearby drainage ditch and entered the underground drainage system.² Gasoline vapors ignited from an undetermined ignition source, and the fire flashed back and engulfed the overturned cargo tank. In addition to the total loss of the tank truck, its cargo, and two parked cars, four homes and their contents were destroyed or heavily damaged by fire, and the residents from a 2-mile-square area were evacuated. Total property damage and cleanup costs were estimated at nearly \$1 million. There were three minor injuries.

The Safety Board's accident investigation determined that the vehicle was traveling 12 to 19 mph over the posted speed limit for the curve, which caused it to overturn. To determine why the driver was traveling at a speed sufficiently excessive to cause an accident, the Safety Board analyzed the driver's background and personal profile, and his training and qualifications. Based on the results of the analysis, the Board concluded that a lapse of attention, for undetermined reasons, by the driver probably led to the operation of his truck at an excessive speed.

One method to overcome inattention is to regularly emphasize the conditions that can lead to and the hazards associated with a loss of stability and eventual rollover. Calzona Tankways, Inc., owner and operator of the vehicle, has indicated that it provides to its drivers flyers about

¹ The accident report contains more detailed information: "Overturn of a Tractor-Semitrailer (Cargo Tank) With the Release of Automotive Gasoline and Fire, Carmichael, California, February 13, 1991," Hazardous Materials Accident Report NTSB/HZM-91/01.

² Based on its investigation, the Safety Board concluded that the gasoline was released through an opening in the manhole cover for the front compartment, most likely after a liquid-level sensor was dislodged by a dynamic surge of the gasoline cargo.

safety practices, such as defensive driving. The Safety Board believes this is a good policy; however, the Board also urges Calzona to provide regular reminders to its drivers about the loss of stability and rollover through Calzona's monthly or semimonthly safety meetings as well as through the periodic flyers and letters that are now being sent to the drivers.

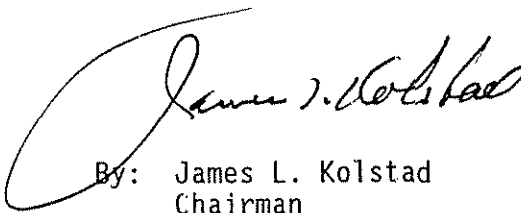
Therefore, as a result of its investigation, the National Transportation Safety Board recommends that Calzona Tankways, Inc.:

Provide regular reminders to company drivers about the loss of stability and rollover through safety meetings, and the periodic flyers and letters sent to the drivers. (Class II, Priority Action) (H-91-38)

Also as a result of its investigation, the Safety Board issued recommendations to the Federal Highway Administration, the Research and Special Programs Administration, and the National Highway Traffic Safety Administration of the U.S. Department of Transportation; the State of California; and to the other States and U.S. Territories.

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 vitally interested in any actions taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendations in this letter. Please refer to Safety Recommendation H-91-38 in your reply.

Chairman KOLSTAD, Vice Chairman COUGHLIN, and Members LAUBER, HART, and HAMMERSCHMIDT concurred in this recommendation.



By: James L. Kolstad
Chairman