LOG 584F

National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: NOV 27 1995

In Reply Refer To: H-95-42 and -43

Mr. Joseph Armentano
Chief Executive Officer
Paraco Gas Corporation, Inc.
2075 Winchester Avenue
Purchase, New York 10577

About 12:30 a.m., on July 27, 1994, a tractor cargo-tank semitrailer loaded with 9,200 gallons of propane (a liquefied petroleum gas) and operated by Suburban Paraco Corporation was traveling east on Interstate 287 in White Plains, New York. The truck drifted across the left lane onto the left shoulder and struck the guardrail; the tank hit a column of the Grant Avenue overpass. The tractor and the semitrailer separated, and the front head of the tank fractured, releasing the propane, which vaporized into gas. The resulting vapor cloud expanded until it found a source of ignition. When it ignited, according to an eyewitness, a fireball rose 200 or 300 hundred feet in the air. The tank was propelled northward about 300 feet and landed on a frame house, engulfing it in flames.

The driver was killed, 23 people were injured, and an area with a radius of approximately 400 feet was engulfed by fire[1]

The National Transportation Safety Board determines that the probable causes of this accident were the reduction in the alertness of the driver (consistent with falling asleep) caused by his failure to properly schedule and obtain rest and the failure of the management of Paraco Gas Corporation, Inc., to exercise adequate oversight of its driver's hours of service. Contributing to the accident was the design of the highway geometrics and appurtenances, which did not accommodate an errant heavy vehicle. Contributing to the severity of the accident was the vulnerability of the bridge to collision from high-speed heavy vehicles.

[1]For more information, read Highway Accident Report--*Propane Truck Collision with Bridge Column and Fire, White Plains, New York, July 27, 1994* (NTSB/HAR-95/02).

The Safety Board examined the time/distance relationship for the drivers assigned deliveries the week of the accident, including a 10-hour breakdown. The accident occurred 48 hours and 57 minutes after the driver began his work week. He drove for a estimated 21 hours and 12 minutes, loaded and unloaded for an estimated 9 hours and 22 minutes, was on duty for 5 hours and 20 minutes of a 10-hour breakdown, totaling 35 hours and 54 minutes of on-duty time. The Safety Board found that at the time of the accident, he had exceeded the hours-of-service rules of the Office of Motor Carriers (OMC); he had exceeded the OMC rule limiting a driver to 10 hours of driving until he has had 8 hours of rest and the OMC rule limiting a driver to 15 hours on duty until he has had 8 hours of rest.

The new scheduling system was only 2 months old at the time of the accident, so the State and Federal governments had had little opportunity to oversee it. No level of the PGC effectively oversaw driver safety, even though the company stated that the monitoring of safety was the responsibility of three levels of management. The OMC examined the records of duty status for 80 days between May and July 1994 and found 37 false entries spanning 37 days. Some of the false entries were blatant; for example, some of the drivers had entered *off duty* in their daily logs for periods in which, in fact, they had made refinery pickups. The accident driver's personnel file did not show that the PGC had reprimanded him for log-book or hours-of-service violations.

The number of violations and the lack of evidence showing that the company took any action indicate the company was not aware of the violations, disregarded them, or sanctioned them. The Safety Board believes that with three levels of management reviewing the driver's trip documentation, someone should have detected the false log book entries. Therefore, the Safety Board concludes that the PGC's oversight of the driver's hours of service was inadequate. The Safety Board believes that the PGC should develop and implement driver scheduling, oversight, and monitoring practices that ensure that drivers obtain adequate rest and comply with Federal hours-of-service requirements.

After the accident, the driver was found face down on the pavement. He had died of severe blunt trauma injuries. There were no loading marks on the front of his body from the seatbelt. Therefore, the Safety Board concludes that he had not worn the restraint system.

The driver would not have been ejected had he worn the restraint system. Since there was no evidence of intrusion into the cab, there was survivable space. However, since the cab was consumed by fire, the Safety Board was unable to determine whether the use of the restraint system would have saved his life.

The National Transportation Safety Board therefore issues the following safety recommendations to Paraco Gas Corporation, Inc.:

> Develop and implement driver scheduling, oversight, and monitoring practices that ensure that drivers obtain adequate rest in accordance with Federal hours-of-service requirements. (Class II, Priority Action) (H-95-42)

Institute a written policy to ensure that all company drivers comply with the Federal Regulations (49 *CFR* 16) requiring the use of seatbelts whenever the vehicle is in motion. Ensure that all drivers are made aware of this requirement, and monitor seatbelt use periodically. (Class II, Priority Action) (H-95-43)

Also, the Safety Board issues Safety Recommendations H-95-32, -33, -34, -35, and 36 to the Federal Highway Administration, Safety Recommendation H-95-37 to the Research and Special Programs Administration, Safety Recommendation H-95-38 to the New York State Department of Transportation, Safety Recommendation H-95-39 to the American Association of State Highway and Transportation Officials, Safety Recommendation H-95-40 to the American Association of Motor Vehicle Administrators, and Safety Recommendation H-95-41 to the American Trucking Associations, Inc. The Safety Board reiterates Safety Recommendations H-94-5, H-95-3, and H-95-5 to the Federal Highway Administration.

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 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 recommendations in this letter. Please refer to Safety Recommendations H-95-42, and -43 in your reply. If you need additional information, you may call (202) 382-6813.

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT and GOGLIA concurred in these recommendations.

By: Jim Hall
Chairman