1094 H 563



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date: August 19, 1987

In reply refer to: H-87-48 and -49

Mr. Richard Kirk President Ritter Transportation, Inc. P.O. Box 1064-A 928 E. Hazelwood Avenue Rahway, New Jersey 07065

About 7 p.m., e.d.t., on April 6, 1987, a tractor-semitrailer operated by Ritter Transportation, Inc. (Ritter) overturned on an interchange ramp as it was exiting from Interstate 295 (I-295) south onto U.S. 1 north near Lawrenceville, New Jersey. The semitrailer tank, an MC-330 cargo tank, contained approximately 8,000 gallons of butane. The Lawrence Township Police Department reported that after the tractor-semitrailer entered the interchange ramp, the truckdriver lost control of the combination vehicle as it rolled to the left, causing it to veer into a guardrail on the outside curve. The cargo tank semitrailer struck a concrete bridge abutment, separated from the tractor, and rolled down an embankment. The tractor stayed on the exit ramp.

The head of the cargo tank was breached when it struck the concrete abutment, causing butane to be released. The butane immediately vaporized, forming a white cloud which spread until it ignited several seconds later. The area was engulfed in a fireball.

Two vehicles traveling on I-295 drove into the vapor cloud; occupants of both vehicles were burned when the vapors ignited. Another vehicle stalled when it entered the vapor cloud while traveling on an interchange ramp from U.S. 1 to I-295; the occupant of the vehicle also was burned when the vapor cloud ignited. Also, an off-duty New Jersey State Police officer was burned after he stopped at the accident site to render assistance. A total of seven persons received burn injuries; two persons were hospitalized in critical condition after receiving burn injuries over approximately 45 to 50 percent of their bodies. The other five persons, including the truckdriver, recevied primarily face and hand burn injuries.

A review of the truckdriver's personnel records indicated that he had been working for Ritter since March 3, 1987, about 1 month before the accident. He had been hired by the owner of the tractor who had leased the vehicle to Ritter. The vehicle then was operated under the authority of Ritter, which was responsible for determining if the driver met all regulatory driver qualification requirements. Ritter's safety director, who had held the job for only 1 day before the accident, said that the accident truckdriver had driven with the owner of the tractor for about a week, and that the owner of the tractor was satisfied with the truckdriver's performance. The truckdriver was not given a road test by anyone from Ritter's management.

On the Ritter employment application, the truckdriver stated that he had been employed as a wrecker driver for a towing company in West Palm Beach, Florida, from 1980 to 1986. He did not indicate on the application any straight truck, tractor-semitrailer, or truck and full trailer driving experience. When interviewed by a safety investigator of the Office of Motor Carrier Safety (OMCS), the truckdriver said that the owner of the tractor had trained him to load and unload chemicals and butane, to placard the vehicle, and to "handle it." The truckdriver also told the OMCS safety investigator that he had received some training from the Florida Wrecker Association; however, the Safety Board was not able to verify the training. The owner of the towing company reported to the OMCS safety investigator that the driver had been employed for only about 6 months and that during that time he had towed automobiles. Although the truckdriver listed the towing company as his only previous employer in 6 years, no one at Ritter had contacted the towing company for information about the truckdriver's work experience.

Additionally, the truckdriver reported on his employment application that he held a Florida license; that his privilege to operate a motor vehicle had never been suspended, revoked, withdrawn, or denied; and that he had not been convicted of any traffic violations (other than parking violations) during the 12 months preceding his employment. Although required by Federal Motor Carrier Safety Regulations (49 CFR 391.23) to request information about the truckdriver's driving record from the appropriate agency of every State in which a truckdriver held a license or permit during the previous 3 years, Ritter did not request that information before the accident.

On April 8, 1987, the Florida Department of Highway Safety and Motor Vehicles reported to the Safety Board that the truckdriver's license was suspended at the time of the accident and that it had been suspended on the following occasions:

<u>Date</u>	<u>Suspension</u>
12/1/82	30 days as a result of 12 points within 12 months; reinstated January 19, 1983
1/8/85	12 months as a result of 24 points within 36 months; reinstated December 2, 1985
1/22/87	Indefinitely as a result of failure to pay traffic fine

The truckdriver's Florida record also included the following convictions of traffic law violations, all of which occurred in Florida:

<u>Date</u>	<u>Violation</u>
12/23/81	Failure to obey traffic instruction sign/device (3 points)
1/6/82	Failure to observe stop sign (0 points)
5/24/82	Unlawful speed-interstate highway, 70 mph in a 55 mph zone (3 points)

<u>Date</u>	<u> Violation</u>
9/24/82	Failure to observe stop sign (3 points)
11/22/82	Unlawful speed, 66 mph in a 50 mph zone (4 points)
4/29/83	Improper passing on viaduct/bridge (3 points)
9/19/83	Unlawful speed, 44 mph in a 25 mph zone (4 points)
3/1/84	Unlawful speed, 50 mph in a 35 mph zone (3 points)
8/1/84	Failure to obey traffic instruction sign/device (4 points)
6/3/85	Failure to yield unsigned intersection (3 points)
6/13/85	Unlawful speed, 75 mph in a 55 mph zone (4 points)
12/12/86	Unlawful speed, 54 mph in a 25 mph zone (4 points)

Additionally, the Lawrence Township Police Department found two recent traffic citations in the vehicle at the accident site. On March 20, 1987, the truckdriver had been cited by a New Jersey law enforcement officer for driving in a restricted lane. On March 22, 1987, an Ohio law enforcement officer had cited the truckdriver for unlawful speed, 74 mph in a 55 mph zone.

Ritter's safety director told Safety Board investigators that the carrier's owner and the vice-president of operations have committed to a new company policy which requires 5 years of tank truck driving experience. He said that previous employment experience would be verified and determined to be acceptable before permitting new truckdrivers to drive. The safety director also said, however, that while driving records will be requested from appropriate State agencies for all new truckdrivers, new truckdrivers may be used before the driving records are received by Ritter due to the lengthy time (about 7 to 10 days) it takes to receive responses from State agencies. While 49 CFR 391.23 allows motor carriers 30 days to request a copy of a driver's driving record and to complete previous employment investigations, the Safety Board believes that applicants' driving records and previous work experience should be determined and evaluated before applicants are permitted to drive motor vehicles, especially those transporting hazardous materials.

In its safety study on training, licensing, and qualification standards for drivers of heavy trucks, $\underline{1}/$ the Safety Board stated that driver performance is a major factor in many truck accidents. Also, when a truck transporting hazardous materials is involved in an accident, the threat to life and property can spread well beyond the immediate site of the accident. The safe operation of trucks carrying hazardous materials requires such attributes as:

^{1/} Safety Study--"Training, Licensing, and Qualification Standards for Drivers of Heavy Trucks" (NTSB/SS-86/02).

- An understanding of the handling properties of both vehicle and cargo;
- The ability to operate the vehicle properly in all types of weather, road, and loading conditions;
- -- Knowledge of correct procedures in areas such as pretrip inspection, loading, and unloading;
- Familiarity with the requirements of State law, Federal regulations, and company policy;
- -- Physical condition free from ailments or drug influence that might impair driving performance;
- -- Adequate rest and nourishment; and
- An attitude that reflects courtesy, respect for the rules of the road, and appreciation of the responsibility that comes with the job.

Because of the dangers posed by hazardous materials, the drivers transporting them must be among the most skilled drivers. In addition to having a high degree of general truck driving skill and experience, drivers transporting hazardous materials need specialized knowledge. They must know the properties of their cargo and the rules of the road concerning the transportation of those materials. In the event of mishap, they will be among the first persons at the scene, so they must be familiar with emergency response procedures. If loading and unloading are part of their responsibilities, they must know the correct procedures for those operations.

Therefore, the National Transportation Safety Board recommends that Ritter Transportation, Inc.:

Establish stringent carrier safety standards for drivers who transport hazardous materials, and obtain pertinent information, e.g., previous employment history, driving records, driving experience, and training, necessary to objectively evaluate applicants' qualifications before allowing them to operate motor vehicles. (Class II, Priority Action) (H-87-48)

Allow only those driver applicants who are determined to meet or exceed Ritter's established standards to operate motor vehicles. (Class II, Priority Action) (H-87-49)

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 Iaw 93-633). The Safety Board is vitally interested in any actions taken as a result of our safety recommendations. Therefore, we 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-87-48 and -49 in your reply.

BURNETT, Chairman, GOLDMAN, Vice Chairman, IAUBER, NALL, and KOLSTAD, Members, concurred in these recommendations.

By. Jim Burnet Chairman

