

## National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Date:

December 5, 1989

In reply refer to: H-89-36

Honorable Travis Dungan Administrator Research and Special Programs Administration 400 7th Street S. W. Washington, D. C. 20590

At 6:20 a.m. on December 6, 1988, a tractor-semitrailer combination operated by Island Transportation Corporation (Island) and loaded with 8,800 gallons of gasoline collided with a Consolidated Rail Corporation (Conrail) train at the Roosevelt Avenue grade crossing near Lafayette Street in Carteret, New Jersey. The truck overturned and caught fire.

The truckdriver died - - no other persons were injured. The tractor-semitrailer, a pickup truck, and two houses southwest of the crossing were destroyed in the fire. At least three other unoccupied vehicles, other buildings, one locomotive, and several vehicles parked nearby were damaged.

The National Transportation Safety Board determined that the probable cause of this accident was the conductor's failure to flag the crossing and the truckdriver's failure to stop his vehicle between 15 and 50 feet of the grade crossing as required. Contributing to the accident was the failure of the engineer to set the headlight of the locomotive facing the crossing on bright. 1/

There were no signs posted at the accident crossing indicating that the crossing was "exempt" from requirements that trucks transporting hazardous materials must stop before traveling over the crossing. East of the accident crossing, both sides of Roosevelt Avenue are occupied by industrial plants for about 3,200 feet. West of the crossing there is a parking lot for the Food, Machinery, and Chemical Corporation plant employees on the north side of Roosevelt Avenue to its intersection with Lafayette Street. West of the crossing four private residences

If For more detailed information, read Railroad/Highway Accident Report - - "Consolidated Rail Corporation Train Collision with Island Transportation Corporation Truck, Roosevelt Avenue near Lafayette Street, Carteret, New Jersey, December 6, 1988," (NTSB/RHR-89/01).

or residential apartments were located on the south side of Roosevelt Avenue west to its intersection with Lafayette Street.

As a motor carrier transporting hazardous materials and operating in interstate or foreign commerce, Island is subject to the requirements of the Federal Motor Carrier Safety Regulations (FMCSR) administered by the U.S. Department of Transportation's Federal Highway Administration (FHWA) contained in Title 49, Code of Federal Regulations, Parts 390 to 397.

Section 392.10(a) of the FMCSR, "Railroad Grade Crossings; Stopping Required," provides that the driver of every cargo tank, whether loaded or empty, used for the transportation of any flammable liquid shall not cross a railroad track or tracks at grade unless he first:

- a) stops the vehicle within 50 feet of and not closer than 15 feet to the tracks, and
- b) listens and looks in each direction along the tracks for an approaching train and ascertains that no train is approaching.

When it is safe to do so, the driver may drive the vehicle across the tracks in a gear that permits the vehicle to complete the crossing without a change of gears. The driver must not shift gears while crossing the track(s).

Section 392.10(b) provides that a stop need not be made at a streetcar crossing, or railroad tracks used exclusively for industrial switching purposes, within a business district as defined in 390.12 of the FMCSR. The FMCSR do not further define what are "railroad tracks used exclusively for industrial switching purposes." This section also provides that a stop need not be made at an industrial or spur line railroad grade crossing marked with a sign reading "Exempt." Such "Exempt" signs shall be erected only by or with the consent of the appropriate State or local authority.

Section 390.12 defines a business district as "the territory contiguous to and including a highway when within any 600 feet along such highway there are buildings in use for business or industrial purposes, including but not limited to hotels, banks, or office buildings, railroad stations, and public buildings which occupy at least 300 feet of frontage on one side or 300 feet collectively on both sides of the highway."

Section 392.2 of the FMCSR, Applicable Operating Rules, provides that "Every motor vehicle must be operated in accordance with the laws, ordinances, and regulations of the jurisdiction in which it is being operated." However, if a Federal regulation imposes a higher standard of care than a local law, ordinance, or regulation, the Federal regulation must be complied with.

One of the truckdrivers who witnessed the accident, and who also frequently drives trucks transporting hazardous materials in the accident area, stated that it was his understanding that the FMCSR do not require a stop at the accident crossing because it is an exempt industrial crossing. The director of safety and personnel for Island stated that he was not sure whether hazardous materials trucks were required to stop at the accident crossing due to the industrial switching exemption.

Section 39:4-128 of the Motor Vehicle and Traffic Laws of New Jersey states that the driver of any vehicle carrying flammable liquids as cargo, before crossing at grade any track or tracks of a railroad shall stop within 50 but not less than 15 feet from the nearest rail, and while stopped shall listen and look in both directions for any approaching train.

The stopping requirement does not apply to crossings which have been appropriately marked as being abandoned, or to crossings marked with a sign reading "Exempt Crossing." New Jersey's requirements do not contain an exemption permitting vehicles transportaing hazardous materials to cross without stopping if the crossing is used for industrial switching purposes unless that crossing has been marked as being exempt from the stopping requirement.

The driver of an eastbound automobile who witnessed the accident reported that he had been over the accident crossing every work day for the last five years and the day of the accident was the first time he had seen a train there. Since the investigation determined that the accident truckdriver usually got on the road around 5:30 a.m., he probably went over the crossing on trips where he used the New Jersey Turnpike at about the same time the automobile driver was going the other way, and the Safety Board believes that the accident truckdriver probably also seldom, if ever, saw a train at the crossing. Because he seldom saw a train at the crossing, the truckdriver may have acquired the habit of slowing, but not stopping, for the crossing, as was reported by one of the witnesses.

The Safety Board believes that the "industrial switching" exemption in Section 392.10 of the FMCSR is vague. To determine if the crossing in fact is exempted, in addition to reaching a decision as to what constituted "industrial switching purposes" and a "business district," a truckdriver approaching a crossing perhaps for the first time would also have to know if the State or local jurisdiction required that a stop be made.

This exemption also is unnecessary. If after evaluation it is determined that a stop need not be made at a particular grade crossing, the provision already contained in the FMCSR that it may be marked as being "exempt" by or with the consent of the local jurisdiction will assist any hazardous materials

truckdriver approaching the crossing in reaching a determination whether he is required to stop. The Safety Board believes that the provision in Section 392.10(b) of the FMCSR which provides that certain vehicles transporting hazardous materials need not stop for grade crossings used exclusively for industrial switching purposes should be eliminated.

On October 8, 1986, the FHWA notified the Safety Board that Section 206 of the Motor Carrier Safety Act of 1984 (49 USC app. 2505) prohibits the modification or elimination of any regulation relative to the transportation of hazardous materials unless and until an equivalent or more stringent regulation has been promulgated under the Hazardous Materials Transportation Act (PL 93-633). The FHWA also advised the Safety Board that the Secretary of Transportation has delegated the responsibility for the development and promulgation of such regulations to the Department of Transportation's Research and Special Programs Administration.

Therefore, the National Transportation Safety Board recommends that the Research and Special Programs Administration:

Delete the provision contained in section 392.10(b) of the Federal Motor Carrier Safety Regulations which permits certain vehicles transporting hazardous materials to cross railroad grade crossings used exclusively for industrial switching purposes without stopping and determining that it is safe to proceed. (Class II, Priority Action) (H-89-36)

Also as a result of its investigation of this accident, the Safety Board issued safety recommendations R-89-62 through -64 to Consolidated Rail Corporation, R-89-65 to the Federal Railroad Administration, H-89-35 to the New Jersey Department of Transportation, and H-89-37 to the National Tank Truck Carriers, Inc. of the American Trucking Associations.

KOLSTAD, Acting Chairman, and BURNETT, LAUBER, NALL, and DICKINSON, Members, concurred in this recommendation.

James L. Kolstad Acting Chairman