National Transportation Safety Board

Washington, D. C. 20594

Safety Recommendation



Date: October 24, 1988

In reply refer to: R-88-56 and -57

Mr. Arnold B. McKinnon Chairman and Chief Executive Officer Norfolk Southern Corporation 1 Commercial Place Norfolk, Virginia 23510

On September 8, 1987, a New Orleans Terminal (NOT) crew moved six tank cars of butadiene from the NOT's Oliver Yard in New Orleans, Louisiana, and at 7:35 p.m. placed them on track 3 of the CSX Transportation's (CSXT) Terminal Junction Interchange Yard (interchange yard) for delivery to the CSXT. About 1:50 a.m. on September 9, 1987, butadiene leaking from one of the tank cars was ignited and the resulting flames rising about 100 feet into the air engulfed both bridge spans of Interstate 10. The fire receded to the leaking tank car where it burned beneath the tank car until 1:55 p.m. on September 10, 1987. During the emergency, more than 200 city blocks were evacuated affecting 800 to 1,000 residents.

The National Transportation Safety Board's 1985 report on railyard safety² reviewed the status of emergency preparedness for handling releases of hazardous materials in railyards and concluded that much work remained to be accomplished. On April 30, 1985, it issued the following recommendations:

--to all railroads which operate railroad yards (the Southern Railway System and the Chessie System Railroads were excluded as they already had established a corporate policy for meeting the objective of the recommendation):

R-85-53

In coordination with communities adjacent to your railroad yards, develop and implement emergency planning and response procedures for handling releases of hazardous materials. These procedures should address, at a minimum, initial notification procedures,

¹For more detailed information, read Hazardous Materials/Railroad Accident Report--Butadiene Release and Fire from GATX 55996 at the CSX Terminal Junction Interchange, New Orleans, Louisiana, September 8, 1987 (NTSB/HZM-88/01).

²Special Investigation Report--Hazardous Materials and Emergency Preparedness, April 30, 1985 (NTSB/SIR-85/03).

response actions for the safe handling of releases of the various types of hazardous materials transported, identification of key contact personnel, conduct of emergency drills and exercises, and identification of the resources to be provided and the actions to be taken by the railroad and the community.

The Norfolk Western Railroad did not respond to the Safety Board's recommendation. It was merged into the Norfolk Southern as was the Southern Railway System, and the railward preparedness policies of the Southern Railway System, while modified, became the policy of the Norfolk Southern. Norfolk Southern was one of the first rail carriers to develop and begin implementing systemwide yard-specific hazardous materials emergency planning. During the Safety Board's public hearing on Hazardous Materials Yard Safety on July 23, 1983, the Norfolk Southern representative stated, "The respective division superintendents and their staffs are responsible for the implementation of the plan for each yard, because each yard's circumstances differ and merit differing responses." Key elements of this plan include a familiarization tour with local emergency response personnel, emergency notification lists, a scale map of the yard, and readily available product handling and response guides. Despite the Norfolk Southern's policy regarding hazardous materials yard planning, the NOT yards in New Orleans had not implemented this policy fully. Before the September 9, 1987, accident, there had been several planning meetings between the New Orleans Fire Department (NOFD) and Norfolk Southern concerning the company's emergency plans. The latest such meeting occurred on September 18, 1986, and an official of the NOFD and the city's emergency management coordinator attended. During this meeting, both the Norfolk Southern Emergency Response Procedures and the NOT Company Emergency Response Plan were reviewed. However, during the Safety Board's hearing, city officials stated that they were not knowledgeable of the Norfolk Southern's specific emergency plans for its Oliver or Shrewsberry railyards.

In investigating this accident, it was found that the preparedness of the NOT for effectively responding to a hazardous materials emergency in its railyards and the coordination of the related planning with the affected community was deficient. Specifically, local management employees had not carried out effectively management's policy for the coordination of local planning activities with community officials. The Norfolk Southern includes in its response procedures an emergency notification list. At the time of this accident, this list was not current in the emergency procedures reviewed by the Safety Board. In response to this finding, Norfolk Southern advised that between September 1-9, 1987, numerous changes in personnel were made at the NOT Company. While the list in the emergency procedures was not current, Norfolk Southern advised that a correct, current phone number list of key employees, who during this time resided in motels, was kept by the yardmaster on duty in the Oliver Tower. Also, the management of the NOT should have been more vigilant and recognized that its policies on coordinating and cooperating with the city had not been implemented fully.

The Safety Board has received no information as to corrective actions taken by the NOT nor is it aware of any action taken for mutual assistance when an accident occurs at locations where different railroad company facilities interface. At such locations, there may be valid reasons for a railroad to question if it legally has possession of a rail car; however, such questions should never be allowed to adversely affect the response to an emergency that threatens the lives of the public, of emergency response personnel, or of railroad employees. In this accident, the CSXT, although uncertain as to its legal responsibility, recognized the untenable situation

presented to the mayor of New Orleans in that Western Emergency Services Incorporated (WES), emergency service contractors, would contract only with one of the railroads, but neither railroad would accept responsibility for the burning tank car. Consequently, CSXT took the initiative to provide the necessary assistance by contracting with WES. The Safety Board has not been involved in railroad accident investigations that have exhibited this interface problem; however, the events of this accident demonstrate that such contingencies must be considered by the management of railroad companies and that a plan of mutual assistance should be incorporated into each company's written emergency response plan.

Therefore, the National Transportation Safety Board recommends that the Norfolk Southern:

Review each railyard's implementation of the company procedures for emergency preparedness, including the coordination with communities adjacent to the railyard of the provisions of its emergency plans, and require immediate correction of all deficiencies. (Class II, Priority Action) (R-88-56)

Implement a procedure for periodically determining that its railyard management maintains up-to-date emergency notification listings for local emergency response agencies and that employees required to have these lists have current information and know when and how to use them. (Class II, Priority Action) (R-88-57)

Also as a result of its investigation, the Safety Board issued Safety Recommendations I-88-3 and -4 and R-88-55 to the city of New Orleans, I-88-5 to the New Orleans Public Service, Inc., R-88-58 through -64 to the Federal Railroad Administration, R-88-65 to the General American Transportation Corporation, R-88-66 and -67 to the Mitsui & Company (USA) Inc., R-88-68 to the GATX Terminals Corporation, I-88-6 to the Research and Special Programs Administration, R-88-69 to the National League of Cities, and R-88-70 to the National Governors' Association.

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 R-88-56 and -57 in your reply.

KOLSTAD, Acting Chairman, and BURNETT, NALL, and DICKINSON, Members, concurred in these recommendations. LAUBER, Member, did not participate.

By: James L. Kolstad Acting Chairman