National Transportation Safety Board

Washington, D. C. 20594

Safety Recommendation

LOGIT-90A

Date: October 24, 1988 In reply refer to: I-88-5

Mr. James M. Cain President New Orleans Public Service, Inc. P.O. Box 60340 New Orleans, Louisiana 70160

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.

New Orleans was not notified in a timely manner about the escape of butadiene from the tank car. Timely notification would have provided increased opportunity for the New Orleans Fire Department (NOFD) to evacuate the citizens in the threatened area and then to initiate action for minimizing the spread of the butadiene and for eliminating sources of ignition. The first indication of a leak in the area was detected more than 4 hours before ignition occurred, but it was not reported because the unusual odor detected was considered insignificant. About 2 hours before ignition occurred, the odor had increased, but because it was believed that escaping natural gas was the source of the odor, a report was made at 1:14 a.m. to the local natural gas company, New Orleans Public Service, Inc. (NOPSI). The NOPSI did not immediately dispatch an employee to investigate the odor, nor did it notify the NOFD of the report and seek assistance even though it had a direct telephone communication link with the NOFD for such purposes.

The NOFD initially received notice of a "possible gas leak" in the general area of the tank cars about 25 minutes before the ignition occurred. Although this was a

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).

report of a gas leak, the NOFD did not advise the NOPSI of the report or request the gas company to use its detection equipment to aid in the search for the reported gas leak. Had either the NOPSI or the NOFD coordinated with the other at this time, it might have become evident that a dangerous situation was occurring, particularly after the NOFD received its second report. With the three complaints of gas being reported within minutes of each other and with knowledge of the wind direction, the National Transportation Safety Board believes it is reasonable to expect that with an early response, the NOFD and/or NOPSI could have identified the source of the leak. However, it is not possible to conclude that the ignition could have been prevented given the time of the ignition and the uncertainty about the amount of butadiene being released initially. However, early recognition of the problem would have provided time for the NOFD to begin evacuating citizens from the area. The Safety Board concludes that the lack of coordination between the NOFD and NOPSI relative to the reports of gas leaks clearly indicates that New Orleans and the NOPSI need to improve their procedures for handling complaints of gas leaks and for communicating with each other when assistance is needed. The NOFD should routinely notify NOPSI of any gas odor reports it receives.

Therefore, the National Transportation Safety Board recommends that the New Orleans Public Service, Inc.:

Communicate to and coordinate with the New Orleans Fire Department Communications Center about any reported gas odors or leaks to which it is unable to investigate expeditiously and about any reports of gas odors or leaks which may pose immediate threats to persons or property. (Class Π , Priority Action) (I-88-5)

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, R-88-56 and -57 to the Norfolk Southern, 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 recommendation in this letter. Please refer to Safety Recommendation I-88-5 in your reply.

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

James L. Kolstad Acting Chairman

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