

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: April 21, 1977

Forwarded to:

Mr. William Driver
President
Manufacturing Chemists Association
1825 Connecticut Avenue, N.W.
Washington, D.C. 20009

SAFETY RECOMMENDATION(S)

R-77-12

About 4:25 a.m., on May 16, 1976, a Chicago and North Western Transportation Company (CNW) freight train derailed near Glen Ellyn, Illinois. Another CNW freight train, which was moving on an adjacent track, collided with the derailed cars; the locomotive and nine cars of this train derailed. During the derailment, the head on a tank car was punctured by the coupler of another car; the tank car's anhydrous ammonia cargo escaped. Fifteen persons were injured as a result of the derailment and release of the ammonia. Damage from the accident amounted to \$1,914,600. ^{1/}

The emergency personnel at Glen Ellyn performed exceptionally well during this emergency. They confined the ammonia's harm to minor injuries and minor ecological damage. Their lack of expert advice during the earliest stage of the emergency, however, shows a weakness in current methods of assisting emergency personnel in accidents involving hazardous materials.

The Manufacturing Chemists Association's Chemical Transportation Emergency Center (CHEMTREC) was established to assist onscene personnel in handling chemical emergencies. The CHEMTREC approach relies on emergency personnel to recognize that they require assistance and to take the initiative in seeking such assistance. When contacted, CHEMTREC provides the caller with information from written data sources. If the caller desires further assistance, CHEMTREC arranges to have a knowledgeable technical representative of the shipper or one of CHEMTREC'S member companies communicate directly with the caller.

^{1/} For more detailed information on this accident, read "Railroad Accident Report: Chicago and North Western Transportation Company, Freight Train Derailments and Collision, Glen Ellyn, Illinois, May 16, 1976," NTSB-RAR-77-2.

(2)


This arrangement does not provide technical expertise to local officials during the earliest diagnostic stage of the emergency. What is needed is for such experts to assist the local officials in correctly diagnosing the dangers in a specific train wreck, to answer the local officials' questions immediately, and to alert the local officials to potentially dangerous situations which might develop as the emergency continues.

Such timely assistance requires the establishment of a communication link between the railroad dispatchers or local public safety officials and technical experts who can advise and counsel onscene officials as soon as the presence of hazardous materials in a train wreck is known. The Board recognizes that the establishment of such a procedure is complex and requires careful study. In view of the Manufacturing Chemists Association's experience with its CHEMTREC operations, its contacts with other organizations offering emergency assistance, and its knowledge of the expertise that might be available to staff such an operation, we believe that your organization is best able to carefully study the considerations involved in this approach.

Therefore, the National Transportation Safety Board recommends that the Manufacturing Chemists Association:

Analyze the operating experience of the CHEMTREC system and furnish the Materials Transportation Bureau of the U.S. Department of Transportation with recommendations for a system to link appropriate hazardous materials experts with onscene public safety officials during the critical first few minutes of a train accident involving hazardous materials. (Class II, Priority Followup) (R-77-12)

TODD, Chairman, BAILEY, Vice Chairman, McADAMS and HOGUE, Members, concurred in the above recommendation. HALEY, Member, did not participate.


for By: Webster B. Todd, Jr.
Chairman