

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: August 11, 1976

Forwarded to:

Mr. William T. Coleman, Jr.
Secretary
Department of Transportation
Washington, D. C. 20590

SAFETY RECOMMENDATION(S)

P-76-65 and 66

At 7:52 a.m. on March 23, 1976, a 1,000-gallon liquefied petroleum gas (LPG) tank owned by Lehigh Utilities, Inc., ruptured in a residential neighborhood of Lehigh Acres, Florida. Liquid and vapors escaped from the ruptures. The escaping liquid vaporized, formed a white, fog-like cloud near the ground, and ignited. The ensuing fire and explosion killed one person, destroyed one truck, and damaged another.

The Safety Board's investigation disclosed that a truck had backed over the buried LPG tank and had struck the tank's manhole, which extended 12 to 14 inches above ground level. The impact ruptured the tank's fill pipe, its relief valve, and its liquid-level gauge.

The tank was part of a pipeline system which was installed in December 1972 to supply gas to a residential neighborhood which was being developed by the gas system's parent company, Lehigh Acres Development, Inc. The system incorporated two buried 1,000-gallon LPG tanks at each end of the pipeline, which extended three blocks. Although vehicles were driven over the undeveloped lots to unload construction materials, the locations of the LPG tanks and the pipeline were not marked or protected from the vehicles.

Had the pipeline not crossed a public road, the system would not have been subject to 49 CFR 192, because it served only two customers, and LPG systems which serve less than 10 customers are exempt unless a portion of the system is located in a public place. However, had this system transported natural gas, the system would have been subject to the regulation regardless of the number of customers served. This exemption appears to be unjustified from the standpoint of protection of the public-at-risk.

The tank ruptured at the juncture of the relief valve and the fill pipe, at the juncture of the fill pipe and the tank, and at the juncture of the liquid-level gauge and the tank. The L.P. Gas Division of the State of Florida's Insurance Commission, which is responsible for determining compliance with the provisions of 49 CFR 192 by LPG operators in Florida, interprets 49 CFR 192.11 to include all facilities of the pipeline system, including tanks, whereas the Office of Pipeline Safety Operations (OPSO) of the Department of Transportation has not determined whether OPSO has jurisdiction over LPG tanks which are connected to pipeline systems. The fact that OPSO has not determined whether it has jurisdiction over LPG tanks might be detrimental to the safety of persons who live adjacent to these systems since operators of the systems may be unsure whether 49 CFR 192 applies to their systems. The impact of this problem is great since there are hundreds of such systems in Florida and thousands in the Nation.

Therefore, the National Transportation Safety Board recommends that the Office of Pipeline Safety Operations of the Department of Transportation:

Clarify its jurisdiction with respect to LPG tanks which are connected to a pipeline system that transports LPG vapor. (P-76-65) (Class II, Priority Followup)

Modify the exemption from 49 CFR 192 for pipelines with less than 10 customers to include systems that have pipeline facilities which expose a substantial part of a community or neighborhood to a potential hazard. (P-76-66) (Class II, Priority Followup)

TODD, Chairman, BAILEY, Vice-Chairman, McADAMS, HOGUE, and HALEY, Members, concurred in the above recommendations.

Kay Bailey for

By: Webster B. Todd, Jr.
Chairman

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