LOG P-59 Not 1870 Rec P-78-6300164

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ISSUED: August 11, 1976

Forwarded to:

Mr. Gerry Long Manager Lehigh Utilities, Inc. Lehigh Acres, Florida 33963

SAFETY RECOMMENDATION(S)

P-76-63 and 64

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.

The National Fire Protection Association Standard No. 58, "Standard for Storage and Handling of Liquefied Petroleum Gases," has been adopted as part of 49 CFR 192, "Transportation of Natural and Other Gas by Pipeline." The Standard requires that pipeline operators take precautions against vehicular damage where such is a possibility and that, where necessary, manholes and other connections be protected from vehicles.

Therefore, the National Transportation Safety Board recommends that Lehigh Utilities, Inc.:

Mark the location of all buried LPG tanks, which may be damaged by vehicles, to alert drivers that they are driving near a buried tank. (P-76-63) (Class I, Urgent Followup)

Protect the manhole of and piping connections to all LPG tanks which may be damaged by vehicles. (P-76-64) (Class I, Urgent Followup)

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

By: Webster B. Todd, Jr. Chairman

NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C. 20594

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