



National Transportation Safety Board

Washington, D.C. 20594

Safety Recommendation

Log P-313F

Date: MAR - 6 1996

In reply refer to: P-96-13

Mr. Garry L. Briese
Executive Director
International Association of Fire Chiefs
4025 Fair Ridge Drive
Fairfax, Virginia 22033-2868

About 6:45 p.m. on June 9, 1994, a 2-inch-diameter steel gas service line that had been exposed during excavation separated at a compression coupling about 5 feet from the north wall of John T. Gross Towers, an eight-story retirement home operated by the Allentown Housing Authority at Allentown, Pennsylvania. The failed UGI Utilities, Inc., service line released natural gas at 55 psig pressure, and the escaping gas flowed underground to Gross Towers. The gas passed through openings in the building foundation, entered the mechanical room through floor vents, and migrated to other building floors.

About 6:58 p.m., the natural gas that had accumulated within the building was ignited, causing an explosion. A second explosion occurred about 5 minutes later. At the time of the explosion, many of the residents were out of the building. The accident resulted in 1 fatality, 66 injuries, and more than \$5 million in property damage.¹

The National Transportation Safety Board determines that the probable cause of the explosion and fire was the failure of the management of Environmental Preservation Associates, Inc., (EPAI) to ensure compliance through project management with its own excavation requirements and those of the Occupational Safety and Health Administration. (The EPAI had an excavation adjacent to the UGI service line.) Contributing to the accident was the failure of the EPAI workmen to notify the UGI that the line had been damaged and was unsupported.

Because the city's fire inspectors saw on May 23 that the service line was unsupported, they could have prevented the accident. They showed proper concern about the safety of the line, especially after a piece of asphalt pavement fell on it and deformed it. However, not having been instructed to do otherwise, both inspectors relied on the EPAI foremen's assessment that the line was safe. It would have been more prudent of them to ask the pipeline owner for the assessment.

¹For more information, read Pipeline Accident Report *UGI Utilities, Inc., Natural Gas Distribution Pipeline Explosion and Fire, Allentown, Pennsylvania, June 9, 1994* (NTSB/PAR-96-01).

The Safety Board concludes that the likely reason the fire inspectors did not tell the operator that its service line was damaged was because the inspectors did not understand the importance of notifying operators so the effects on a facility could be assessed by the operators and necessary action taken. Had the inspectors notified the UGI, it, the Safety Board believes, would have taken the necessary corrective actions, and the accident would not have happened.

The Safety Board believes that the city should encourage its inspectors to report any damage to the facility owner and thus ensure that the potential effect on public safety is assessed by a qualified person. Consequently, the Safety Board encourages Allentown to cooperate with the UGI by instructing its inspectors to report observed or suspected damage to the facility owners. Additionally, the Safety Board believes that the International Association of Fire Chiefs should likewise encourage its members to instruct their inspectors to report observed or suspected damage directly to buried-facilities owners.

The National Transportation Safety Board therefore issues the following safety recommendation to the International Association of Fire Chiefs:

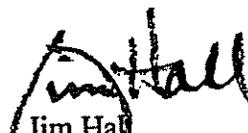
Urge its members to instruct their inspectors to report observed or suspected damage to a buried facility, including lack of support, to the owner immediately.
(Class II, Priority Action) (P-96-13)

Also, the Safety Board issues Safety Recommendations P-96-2 to the Research and Special Programs Administration; P-96-3 to the States and the District of Columbia; P-96-4 through -6 to UGI Utilities, Inc.; P-96-7 to Environmental Preservation Associates, Inc.; P-96-8 through -10 to the Governor of the Commonwealth of Pennsylvania; P-96-11 and -12 to the city of Allentown; P-96-14 through -16 to the Department of Housing and Urban Development; P-96-17 and -18 to the Allentown Housing Authority; P-96-19 to the Associated General Contractors; and P-96-20 to the National Utility Contractors 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 P-96-13 in your reply. If you need additional information, you may call (202) 382-0670.

Chairman HALL, Vice Chairman FRANCIS, and Members HAMMERSCHMIDT and GOGLIA concurred in this recommendation.

By:


Jim Hall
Chairman