

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

FOR RELEASE: 6:30 A.M., E.S.T., APRIL 19, 1976

(202) 426-8787

ISSUED: April 19, 1976

Forwarded to:

Mr. Richard L. Sanderson
Executive Director
Building Officials and Code
Administration International, Inc.
1313 East 60th Street
Chicago, Illinois 60637

SAFETY RECOMMENDATION(S)

P-76-13

Mr. William Vasvary
Executive Director
Southern Building Code Congress
3617 Eighth Avenue South
Birmingham, Alabama 35222

Mr. Neil McLean
Executive Director
Plumbing Code Committee
International Association of Plumbers
and Mechanics Officials
5032 Alhambra Avenue
Los Angeles, California 90032

At 6:57 a.m. on April 22, 1974, a massive, low-order explosion demolished the west wall of a 25-story commercial building at 305 East 45th Street in New York, New York. The structure of the adjacent building was damaged and glass was broken in other buildings in the area. Glass fragments and slivers were blown into 46th Street, where they lay 1 inch deep in places. No persons were killed, but more than 70 persons were injured.

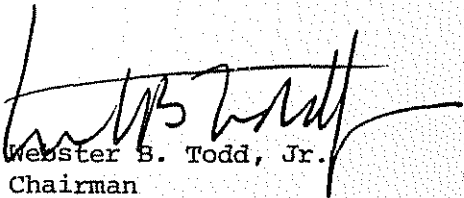
The National Transportation Safety Board's investigation showed that a 6-inch service line located in the basement of the building had been struck from below and severed by a ruptured hydropneumatic pressure tank installed directly underneath. Gas at 7 inches of water column flowed at 54,000 cubic feet per hour from the open end of the separated service line. Gas leakage continued for about 1/2 hour. Gas odors finally were noticed by a building occupant, but the building exploded before any mitigative efforts took place.

The location of the hydropneumatic pressure tanks directly under the gas service line was a critical factor in this accident. Since the gas line was installed first around 1930, and the pressure tanks were installed at a later date, the tanks should have been located at some other point in the basement where potential danger to existing facilities would be at a minimum. No Federal, New York State, or New York City regulations exist for the placement of equipment in relation to other equipment in basements. The plumbing codes also do not specifically relate to the placement of equipment in relation to other equipment, but these codes form the basis for the city regulations.

Therefore, the National Transportation Safety Board recommends that the Building Officials and Code Administration International, Inc., the Southern Building Code Congress, and the Plumbing Code Committee of the International Association of Plumbers and Mechanics Officials:

Review their codes to insure that adequate instructions are listed for the location of natural gas service lines in relation to other plumbing facilities such as pressure tanks and boilers in industrial, commercial, and residential buildings. (Recommendation P-76-13) (Class II, Priority Followup)

TODD, Chairman, McADAMS, THAYER, BURGESS, and HALEY, Members, concurred in the above recommendations.


By: Webster B. Todd, Jr.
Chairman

THIS DOCUMENT WILL BE RELEASED TO THE PUBLIC ON THE DATE SHOWN ABOVE. NO PUBLIC DISSEMINATION OF THIS DOCUMENT SHOULD BE MADE BEFORE THAT DATE.