

VI. RECOMMENDATIONS

(Listed after each recommendation are the numbers of the conclusions upon which such recommendations are based)

The Safety Board recommends that:

1. The Office of Pipeline Safety of the Department of Transportation take the following actions:

(a) Require in the minimum Federal Safety Standards that each gas utility establish a program for the prevention of construction-originated damage to its underground facilities. This program should contain provisions: (1) for education and general liaison with contractors and their machine operators; (2) for obtaining notices of construction work in close proximity to underground gas facilities; (3) to insure that gas facilities are marked or otherwise protected during such construction work; and (4) to followup and investigate accidents which do occur, to determine where the program failed and how it can be strengthened. (Conclusion 13, Appendix IV.)

P-70-29

(b) As a part of its enforcement activity, study the regulator design, maintenance, and testing procedures of the utilities under its direct jurisdiction, including municipal operations not regulated by States, to determine whether gas consumers will be properly protected against overpressurization in the event of a malfunction of a primary regulator. This would include sampling observations to determine whether regulators are adjusted properly, maintained, and tested on a regular basis so that they will function correctly, and whether the control line is protected from damage. (Conclusion 1, 4, and 8.)

30

(c) Conduct a study to determine what constitutes a safe maximum operating pressure for low-pressure distribution systems. Further, use the results of such study in formulating minimum Federal Safety Standards, so that the desired pressure and the correct functioning of monitoring regulators and other overpressure protection devices will be defined. (Conclusion 5.)

31

PAR-70-1

- 32 (d) Review the ability of the gas utilities under its direct jurisdiction to receive and process telephone calls during emergencies. Determine whether a minimum Federal Safety Standard is necessary. (Conclusion 16.)
2. All States, the District of Columbia, and Puerto Rico take the following actions:
- 33 (a) Consider the enactment of legislation to require: (1) persons planning to excavate or blast to notify the gas utility operating in the area (Conclusion 13, Appendix III), and (2) local authorities and others who issue construction permits to cooperate with the gas utilities to facilitate the obtaining of notices of proposed excavation. (Appendix IV.)
- 34 (b) Encourage utilities having underground facilities in the same area such as gas, electric, and telephone, etc., to establish a coordinated notification facility, where practicable, so that a person planning to excavate or blast can inform all utilities by making one telephone call. (Appendix IV.)
- 35 (c) Review the regulator design, maintenance, and testing procedures of the gas utilities under State jurisdiction to determine whether all gas consumers will be properly protected against overpressurization in the event of a malfunction of a primary regulator, along the same lines recommended in 1(b), above. (Conclusion 4.)
- 36 (d) Review the ability of the gas utilities under their jurisdiction to receive and process telephone calls during emergencies. (Conclusion 16.)
3. Iowa Southern Utilities, Inc., take the following actions:
- 37 (a) Review its own regulator design, maintenance, and testing procedures to determine whether its gas consumers will be properly protected against overpressurization in the event of a malfunction of a primary regulator. (Conclusions 4, 6, 9.)
- 38 (b) Establish a written procedure for preventing damage to underground facilities. The program should contain the same methods recommended to the Office of Pipeline Safety, above. (Conclusion 13, Appendix IV.)

- 39 (c) Improve its ability to receive and process telephone calls during emergencies. (Conclusion 16.)
- 40 (d) Develop a written, comprehensive regulator maintenance and testing procedure to assure proper operation during normal use and in the event of emergencies, pending any government-originated requirements. Appropriate records of maintenance work performed should be made. (Conclusion 7.)

4. The Iowa State Highway Commission take the following actions:

- 41 (a) Revise its procedures so that its inspectors, who will be assigned to a construction job, are aware of the various aspects of the project and problems of interference with utilities. (Conclusions 11, 12.)
- 42 (b) Provide copies of the final construction plans and specifications to all parties involved in the project, such as gas and other utilities, and city officials. (Conclusion 12.)

BY THE NATIONAL TRANSPORTATION SAFETY BOARD:

/s/ JOHN H. REED  
Chairman

/s/ OSCAR M. LAUREL  
Member

/s/ FRANCIS H. McADAMS  
Member

/s/ LOUIS M. THAYER  
Member

/s/ ISABEL A. BURGESS  
Member

October 14, 1970.