

Log P-201A

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: September 8, 1982

Forwarded to:

Honorable Charles Fraas, Jr.
Chairman
Missouri Public Service Commission
P.O. Box 360
Jefferson City, Missouri 65102

Honorable Christopher S. Bond
Governor of Missouri
Jefferson City, Missouri 65101

SAFETY RECOMMENDATION(S)

P-82-37

About 10:30 a.m., e.s.t., on January 28, 1982, at Centralia, Missouri, natural gas at 47 psig entered a low pressure distribution system which normally operated at 11 inches water column (0.40 psig) after a backhoe bucket snagged, ruptured, and separated the 3/4-inch-diameter steel pressure regulator control line at the Missouri Power and Light Company's district regulator station No. 1. The backhoe, which was owned and operated by the city of Centralia, was being used to clean a ditch located adjacent to the pressure regulator station. The high pressure gas entering customer piping systems in some cases resulted in high pilot light flames which initiated fires in buildings; while in other cases, the pilot light flames were blown out, allowing gas to escape within the buildings. Of the 167 buildings affected by the overpressure, 12 were destroyed and 32 sustained moderate to heavy damages. Five persons received minor injuries. 1/

Although Section 319.025 of the Missouri Statutes required the City of Centralia to notify the Missouri Power and Light Company of the proposed excavation operations, notice was not given. The Safety Board believes that had notice been given of the planned cleaning operations, the location of the underground gas facilities could have been identified and marked which would have shown the close proximity of the proposed excavation to the underground facilities. Had the City foreman been provided with this information, it is doubtful that the excavation would have been accomplished using powered excavation equipment.

The State of Missouri recognized the necessity for preventing excavation related damages to underground facilities when it enacted Chapter 319, Missouri Statutes, which requires persons to give notice to operators of underground facilities and obtain information about the location of underground facilities in the area of planned excavation before excavation could begin. The Safety Board supports enactment of state laws that require excavators and operators of underground facilities to follow procedures designed to prevent damages which might endanger the public. However, the Safety Board believes

1/ For more detailed information, read "Pipeline Accident Report -- Missouri Power and Light Company, Natural Gas Fires, Centralia, Missouri, January 28, 1982," (NTSB-PAR-82-3).

that the effectiveness of any program to prevent damage to pipelines or other underground facilities depends on many separate but interrelated factors with statutory requirements constituting only one such factor. Other factors believed necessary are effective, convenient notification systems, aggressive educational and motivational activities to advertise the program, and efficient procedures for identifying and marking the location of underground facilities.

The most efficient and convenient method for excavators to provide the notification required by Section 319.025 of the Missouri Statutes is through a one-call notification system. Such a system is established by utilities and other operators of underground facilities, such as municipalities, as a center that allows an excavator to make one telephone call to notify all participating operators of any planned excavation. The center then alerts each underground facility operator to the need for marking the location of its facilities near the work area. This early notification also provides opportunity for an operator to implement additional action believed necessary for the protection of his facilities.


One-call systems now operate in 44 States with a majority of these systems providing statewide coverage. Every State adjacent to Missouri has a one-call system with the systems in the States of Iowa, Illinois, Kentucky, Tennessee, Arkansas, and Oklahoma providing statewide coverage. After a one-call system has been established, the Safety Board has found that the other factors essential for effective damage prevention programs also have been initiated, generally as a part of the one-call system operations.

Therefore, the National Transportation Safety Board recommends that the Governor of the State of Missouri and the Missouri Public Service Commission:

Encourage operators of underground facilities to develop and implement a statewide one-call excavation notification system. (Class II, Priority Action) (P-82-37)

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." (P.L. 93-633). The Safety Board is vitally interested in any actions taken as a result of its safety recommendations. Therefore, we would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter.

BURNETT, Chairman, and McADAMS, BURSLEY, and ENGEN, Members, concurred in this recommendation. GOLDMAN, Vice Chairman, did not participate.

for By: 
 Jim Burnett *Member*
 Chairman