

Log P-210 SP-20

NATIONAL TRANSPORTATION SAFETY BOARD
WASHINGTON, D.C.

ISSUED: September 22, 1982

Forwarded to:

Honorable George D. Busbee
Governor of Georgia
Atlanta, Georgia 30304

SAFETY RECOMMENDATION(S)

P-82-40

At 7:50 a.m., on June 15, 1982, near Albany, Georgia, a bulldozer track cleat punctured a 12-inch petroleum products pipeline which was operating at 760 psig. Escaping No. 2 fuel oil was ignited and severely burned the bulldozer operator who died on July 6, 1982.

In its investigation of this accident the Safety Board found that the punctured pipeline, owned by Colonial Pipe Line Company (Colonial), was located at a depth of 42 inches and within a pipeline right-of-way crossing private property. Neither the excavation contractor nor the property owner notified Colonial about the planned excavation activity.

Fourteen years before, on May 29, 1968, a bulldozer ruptured a 1-inch gas service line at a children's nursery in Hapeville, Georgia. Seven children and two adults were killed, and three children were seriously injured in the accident. As you know, that accident was the backdrop for H.B. 128 which was enacted into law in 1969 (Georgia Law 1969, p. 50) . This law required persons planning excavation activities to, among other things, notify operators of gas pipelines. Since passage of this legislation, several amendments have been enacted in an effort to improve the effectiveness of this excavation damage prevention statute, including the extension of the notification requirements to liquid pipelines.

Enactment of State laws that require excavators and operators of underground facilities to follow procedures designed to prevent damage does assist in reducing hazards to public safety. However, the Safety Board has found that the effectiveness of damage prevention efforts depends on many other interrelated factors such as convenient notification systems, motivational activities, educational activities to advertise the systems, and efficient procedures for identifying and marking the location of underground facilities before excavation work begins.

The Safety Board believes that the most efficient and convenient method for excavators to provide notice of proposed excavations in compliance with the Georgia statutes is through the use of a one-call notification system. Such a system not only provides notification to gas and liquid pipeline operators, but also to operators of all other underground systems. In the one-call notification system, an excavator makes one telephone call to a center established voluntarily by utilities and other operators of underground facilities (including municipalities), and notifies the center of planned excavations. The center then alerts all participants in the notification system about the planned excavation, which allows them timely opportunity to mark the location of their lines near the work area. This early notification also provides opportunity for operators of underground facilities to implement any additional action which may be necessary to protect against excavation-caused damage.

The Materials Transportation Bureau (MTB) of the U.S. Department of Transportation recently issued a rule ^{1/} for reducing the risks of excavation-caused damage to underground gas pipelines. Operators of underground gas pipelines are allowed to comply with the major aspects of the rule through participation in a one-call notification system because these "...programs have proven themselves cost effective...." Examples of the effectiveness of one-call notification systems cited by the MTB included a 38-percent reduction in excavation-caused damage to underground facilities during the first 2 years of operation of the Connecticut system, a 65-percent reduction in excavation damage during the first year of operation of the Tampa, Florida, system, and a consistent annual reduction in excavation damage since 1970 for the Rochester, New York, notification system -- one of the first one-call systems.

In its reports on pipeline accidents and special studies, the Safety Board has pointed out repeatedly the effectiveness of one-call notification systems in reducing excavation-caused damage, in increasing the awareness of accident possibilities, and in enhancing coordination and communication among excavators, property owners, and operators of underground pipelines. In the State of Georgia, only the metropolitan Atlanta area has a one-call notification system. The Utilities Protection Center in Atlanta was established voluntarily by operators of underground lines and has proven effective in motivating excavators in that area to advise the center of planned excavations. Excavators now can make one telephone call to the center instead of the five, six, or more telephone calls previously necessary to notify individual operators. The former difficulty, if not impossibility, of notifying all parties often resulted in notification not being provided. Had a one-call system existed in the Albany area, the Safety Board believes that the excavation contractor would have been made aware of the importance of notifying Colonial and other operators of underground lines about the proposed excavation.


One-call systems found by operators of underground utilities now operate in 44 States with a majority of these systems providing statewide coverage. In States adjacent to Georgia, statewide one-call systems are in operation in Alabama, North Carolina, South Carolina, and Tennessee. The Safety Board understands that expansion of the Atlanta area one-call system is now being considered to permit it to serve as a one-call center for the State of Georgia. We believe that a statewide one-call excavation notification system would complement previous excavation damage prevention efforts of the State and enhance public safety.

Therefore, the National Transportation Safety Board recommends that the Governor of the State of Georgia:

^{1/} Docket No. PS-59, Admt. No. 192-40; Federal Register Volume 47, p. 13818, April 1, 1982 (49 CFR 192.707).

Through the State's Department of Transportation and the Georgia Public Service Commission encourage and assist the operators of underground facilities in the State of Georgia in their efforts to expand the metropolitan Atlanta area one-call notification system to provide coverage throughout the State of Georgia. (Class II, Priority Action) (P-82-40)

BURNETT, Chairman, GOLDMAN, Vice Chairman, McADAMS, BURSLEY, and ENGEN, Members, concurred in this recommendation.

By: 
Jim Burnett
Chairman