

PI-82-0113
U. S. Department of Transportation
Research and Special Programs Administration
400 Seventh Street, S.W.
Washington, D.C. 20590

December 27, 1982

The Honorable Jim Leach
U.S. House of Representatives
Washington, D.C. 20515

Dear Mr. Leach:

This refers to your communication of December 7, 1982, requesting our consideration of a letter from Bonnie T. Eggers regarding the proper depth at which gas pipelines should be buried. Ms. Eggers' concern stems from the death of two relatives in a recent pipeline accident at Hudson, Iowa.

The Federal safety standards for gas pipelines are set forth in Part 192 of Title 49 of the Code of Federal Regulations. These standards were issued under the Natural Gas Pipeline Safety Act of 1968 (49 U.S.C. 1671 et seq.). Section 192.327 of the standards requires that buried transmission lines in rural areas, like the one involved in the Hudson accident, be constructed with at least 30 inches of soil cover or 18 inches of rock cover. The required cover increases to 36 inches and 18 inches, respectively, for areas with a higher population density. These burial depths exceed the depths that were recommended for gas pipelines by the American Society of Mechanical Engineers in its B31.8 Code for pressure piping that was in effect when the standards were adopted.

The purpose of the prescribed depths is to reduce the likelihood that a buried pipeline will be damaged by normal cultivation or other digging activities. While a greater burial depth might logically be expected to further reduce this likelihood, there is no empirical evidence supporting the proposition that increasing burial depth would be cost-effective from a safety perspective.

In contrast, experience has shown that measures such as line marking, mapping, and advance coordination of construction work provide more effective and economical approaches to damage prevention than deeper burial. In this regard, the Federal safety standards require operators of buried pipelines in rural areas to install permanent marking signs along the pipelines to show their location. Each sign provides a warning, the name of the operator, and a telephone number that an excavator may call to learn more specific information about the pipeline before beginning to dig. Another standard that was recently adopted for pipelines in populated areas (47 FR 13818; April 4, 1982) requires operators to provide a damage prevention program. Typically, under these programs an excavator calls a publicized number before digging, and the pipeline operator furnishes temporary marking at the job site. Such programs provide advance coordination between operators and excavators and are often run in cooperation with operators of other underground utilities. We will be monitoring the effects of the various damage prevention programs established under the new regulation before taking any further rulemaking action toward prevention of outside force damage to buried pipelines. The protective measures that the Federal standards provide are, of course, not infallible. I understand that the pipeline involved in the tragic Hudson accident had been temporarily marked before it was damaged by the trenching equipment. Human error, particularly by excavators outside the pipeline industry and the reach of our jurisdiction, will inevitably continue to be a causal factor in pipeline accidents despite the most diligent Federal regulatory efforts.

I trust this adequately responds to your inquiry, but should you need additional information, do not hesitate to contact me.

Sincerely,
Howard Dugoff

1006 Park Street
University Park, IA 52595

December 1, 1982

The Honorable James Leach
House of Representatives
Washington, D. C, 20515

Dear Mr. Leach:

On November 4, 1932, a gas pipeline exploded near Hudson, Iowa, taking the lives of my uncle, cousin, and three other innocent people'. Not until that tragedy happened was I or the general public aware that the gas companies were required to bury their pipelines only 30 inches deep. This is a travesty which must be remedied.

While I am aware that regulating the gas companies has been delegated to an Administrative Agency; namely, the United States Department of Transportation, I believe this should be changed. Legislation should be introduced to regulate the gas companies.

Although I do plan to petition the United States Department of Transportation, I have worked in a law office for five (5) years and therefore, I know that it is nearly impossible to get an administrative rule change,

Mr. Leach, you represent a state that is largely comprised of farmers. I know of several farmers who presently have exposed pipelines or the pipelines are buried below the minimum standard, 'With soil erosion, doesn't a 30-inch minimum standard seem more than a little ridiculous? How long before a farmer hits one of these lines with a chisel plow? Are you aware that this makes about the fifth explosion in the past three years? Perhaps the loss of a few lives due to lax regulations and indifference are no big deal.

I beseech you to introduce legislation to remedy the situation. My family members can never be brought back, but please don't let them have died in vain.

Please let me hear from you.

Yours very truly,
Bonnie J. Eggers JJ