

July 21, 1975

Mr. E. L. Shaw
Division Engineer
Federal Highway Administration
666 North Street, Suite 105
Jackson, Mississippi 39202

Dear Mr. Shaw:

This responds to your June 17, 1975, memorandum to this office requesting information on pipeline encasement requirements.

The minimum Federal safety standards for transportation by pipeline are 49 CFR Part 192, Transportation of Natural and Other Gas by Pipeline, and 49 CFR Part 195, Transportation of Liquids by Pipeline. Neither of these regulations require that casings be used. However, Section 195.256, Crossing of railroads and highways, of the liquid regulations requires such crossings be installed so as to adequately withstand the dynamic forces exerted by anticipated traffic loads. Section 192.103, General, of the gas regulations requires that all pipelines be designed with sufficient wall thickness, or must be installed with adequate protection to withstand anticipated external pressures and loads. Section 192.323, Casing, sets forth the requirements for casings if they are used on a gas transmission line or main under a railroad or highway.

As a result of an explosion in a casing on a natural gas transmission line near Monroe, Louisiana, on March 2, 1974, the National Transportation Safety Board in Pipeline Accident Report NTSB-PAR-75-1 recommended that the Office of Pipeline Safety Operations undertake an industry wide survey of the use of casings on pipelines in cooperation with the Federal Highway Administration, the American Association of State Highway Transportation Officials and other appropriate industry associations and engineering societies. As yet this project has not been initiated.

The American Society of Civil Engineers (ASCE) has a study that was published in 1971 titled, "Pipeline Crossings of Railroads and Highways." This is available from ASCE, 345 East 47th Street, New York, New York 10017, at a cost of \$3.00.

Thank you for your interest in pipeline safety.

Sincerely,

\signed\
Cesar DeLeon
Acting Director
Office of Pipeline Safety Operations

MEMORANDUM

DATE: June 17, 1975

SUBJECT: Request from Mississippi State Highway
Department for Information on Pipeline Encasement Requirements

FROM: Division Engineer
Jackson, Mississippi

TO: Mr. Joseph C. Caldwell, Director
Office of Pipeline Safety
U.S. Department of Transportation
400 7th Street, S.W.
Washington, D.C. 20590

Our office has recently received a request from the Mississippi State Highway Department for information on pipeline encasement requirements. We quote from their letter:

"We are in the process of reviewing some of our utility policies and particularly in regard to pipeline encasement requirements. We have not been able to find many sources of definitive information on this subject, and the thought occurred that perhaps the Office of Pipeline Safety, which we understand is a branch of the Department of Transportation, might be the best possible source.

"We would appreciate your help in obtaining any data they may have relative to highway pipeline crossings."

We would appreciate any assistance your office can supply concerning sources of information on this subject.

\signed\

E. L. Shaw