

May 27, 1976

Mr. Paul A. Potter
Detectable Subsurface Tape Institute
P.O. Box 12
Deerfield, Illinois 60015

Dear Mr. Potter:

Your letter of April 22, 1976, petitioning to amend 49 CFR 192.321(e) to include a definition of the term "other means" is assigned Docket No. 76-6.

Section 192.321(e) requires that unencased plastic pipe have an electrically conductive wire or "other means" of locating the pipe underground, and you suggest that the "other means" include a detectable tracer tape which can be located from the surface by a pipe/cable locator.

Section 192.321(e) is written in performance type language rather than specification terms. In general, performance regulations state an objective requirement but leave the specific means of compliance to the selection of the operator. Thus, with regard to locating plastic pipe, there may conceivably be many means other than detectable tracer tape, and it would be impractical to include detailed specifications for each means within Section 192.321(e). Therefore, it would not be appropriate to amend §192.321(e) as you have suggested to make specific provision for detectable tracer tape even though it appears to meet the present standard. Accordingly, the petition is denied.

We appreciate your interest in this matter.

Sincerely,

\signed\

Cesar DeLeon
Acting Director
Office of Pipeline
Safety Operations

April 22, 1976

Mr. Cesar DeLeon
Acting Director
Office of Pipeline Safety Operations
Materials Transportation Bureau
Department of Transportation
2100 Second Street, S.W.
Washington, D.C. 20590

SUBJECT: Petition For Amendment of Title 49 CFR Part 192, Section 192.321(e) Per Rule Making Procedures in Part 102, Section 102.31

Dear Mr. DeLeon:

As an interested party on behalf of manufacturers and utilities installing detachable tracer tape over plastic gas lines, we petition you to issue an amendment to Section 192.321(e) which reads as follows:

"Plastic pipe that is not encased must have an electrically conductive wire or other means of locating the pipe while it is underground."

We petition the Acting Director to add the following amending sentence to Section 192.321(e) as follows: "Other means" may be construed to include a detectable tracer tape which can be located from the surface by a pipe/cable locator.

We request this amendment for the following reasons.

1. The amending sentence will clarify the confusion in the interpretation of the phrase "Other means."
2. The amending sentence will codify and acknowledge the present installation practices of gas companies now using detectable tape in their systems in many cases to conform to Section 192.321(e).

3. Gas companies installing detectable tape have found its use to be an advantage over insulated wire because of its greater visibility, flat shape, orange color and in many cases easier to locate inductively than wire. Material cost is a factor too.

4. Some gas companies install detectable tracer tape because of its warning feature to help prevent excavator damage or to comply with local laws such as the one issued June 18, 1973 by the Fairfax County Board of Supervisors, Fairfax, Virginia.

5. To be consistent with Specifications written by other governmental agencies such as the General Services Administration in its Public Buildings Service Guide Specifications, Volume 4, Pages 1501-14, Paragraph 18, Subparagraph 18.1.1 as amended October, 1973 which reads as follows:

"Where non-metallic piping location is to be identified, an electrically conductive wire or other means of locating the underground pipe by electronic pipe detector shall be provided. "Other means" may be construed to include a detectable tape which can be located from the surface by a detector. Where detectable tape is employed, tape shall be not less than two inches in width by 0.0055 inch thick with a tensile strength of 50 pounds; this type of tape may be used for other piping in lieu of the 6 inch wide tape specified above."

We hereby request that the Acting Director of the Office of Pipeline Safety Operations issue the recommended amendment in accordance with Section 102.31.

Respectfully Submitted,

\signed\

Paul A. Potter
DETECTABLE SUBSURFACE TAPE INSTITUTE

Detectable SubSurface Tape
Institute

EXHIBITS FOR PETITION

TO AMEND TITLE 49 CFR

Part 192, Section 192.321(e)

Per Rule Making Procedures in

Part 102, Section 102.31

- A. Installation of Detectable Marking Tape
Sections 211.31 and 211.32
- B. Recommended Practice for Marking Liquid
Petroleum Pipeline Facilities, by
American Petroleum Institute, Washington, D.C.
- C. Louisiana Department of Highways Policy and
Specification Requirements for Location of Non-
Conductive Underground Utility Pipe Lines. Electrically
- D. Fairfax, Virginia, County Code Governing Excavation and
Installation. Utility Line
- E. Typical Warning Tape Installation, LOVaca Gathering Co.
- F. Installing Services Instructions of Philadelphia Electric
or Coated Steel Pipe. Company for Plastic

ATTACHMENT
EXHIBIT A: INSTALLATION OF DETECTABLE MARKING TAPE

EXHIBIT B

RECOMMENDED PRACTICE FOR MARKING LIQUID PETROLEUM PIPELINE FACILITIES

ISSUED BY

AMERICAN PETROLEUM INSTITUTE
DIVISION OF TRANSPORTATION
1801 K STREET, N.W.
WASHINGTON, D.C. 20006

FOR SALE BY

AMERICAN PETROLEUM INSTITUTE
PUBLICATION SECTION
1801 K STREET, N.W.
WASHINGTON, D.C. 20006

2.8 DETERMINING THE LOCATIONS FOR PIPELINE MARKERS

The use of conventional Pipeline
Warning signs is not recommended in heavily

developed urban areas such as downtown
business centers where placement is
impracticable, or would not serve the
purpose for which markers are intended, or
when the local government maintains current
substructure records. In such areas the car-

riers may elect to indicate the presence of a pipeline by means of stenciled markings, cast monuments, plaques, signs, or other devices installed in curbs, sidewalks, streets, building facades or wherever else practicable.

a. Pipeline Markers should be located at each public road crossing, at each railroad crossing and in sufficient number along the remainder of each buried line so that its location is accurately known. The latter may be accomplished by placing markers at fence lines, property lines right-of-way boundaries and in open areas wherever the party exerting control over the surface use of the right-of-way will permit such installation.

b. Pipeline Warning Signs should be installed at locations where the pipeline is above ground and is accessible to the public. Aerial crossings on any type of structure either publicly or privately owned should be considered for this purpose as being accessible to the public. Pipeline Warning Signs should be placed on each side of a traversed waterway or any impoundment which is an active source of water supply.

c. Navigable Waterway Pipeline Warning Signs should be placed on each side of all crossings of navigable waterways. Such installation should also include a Standard Pipeline Warning Sign, for each buried pipeline crossing, which should be installed above the normal high water line. Special Pipeline Warning Signs should be used at non-navigable waterways where there are activities or operations that could damage the pipeline. (See Drawing No.3)

3.0 OTHER PIPELINE MARKING PRACTICE

3.1 AERIAL PATROL MARKERS

Aerial Patrol Markers may be used along the route of the pipelines to aid in their patrol by aircraft. Drawing No. 4 is an example of an appropriate Aerial Marker installation.

3.2 PAINTING AND BANDING SIGN SUPPORTS

The selection of colors and the marking of sign supports should be determined by the carrier.

3.3 LINE MARKING PLACED UNDERGROUND

It may sometime be desirable to install a buried marker tape during construction of a pipeline as a supplement to other marking practices. If installed, such a tape should be brightly colored and warn in print of the presence of a pipeline.

3.4 PIPELINE FACILITIES SIGNS

Fence or rail guarded facilities or appurtenances, such as pumping stations, terminals, delivery facilities, tank farms, valves, metering or pipeline junction manifolds, should be marked with appropriate signs. Drawing No.5 is an example of such a sign. Carriers should maintain these signs around those facilities which are visible or accessible to the public. These signs should contain the name of the carrier and an emergency telephone number. The signs may also contain other data, such as the type

or name of the facility, a mailing address, instructions, prohibitions and warnings.

4.0 MAINTENANCE

The maintenance of markers and signs should be a part of the carrier's regular maintenance procedures. Signs, along with their supporting structures, should be maintained in their original state of effectiveness. Damaged or defaced signs should be replaced. Markers should not be obscured by vegetation. Markers whose effectiveness has been compromised by construction or development should be relocated to restore effective marking.

EXHIBIT C

STATE OF LOUISIANA
DEPARTMENT OF HIGHWAYS
P.O. BOX 44245, CAPITOL STATION
BATON ROUGE, LA. 70804

August 21, 1973

DEPARTMENTAL POLICY AND
SPECIFICATION REQUIREMENTS FOR
LOCATION OF NON-ELECTRICALLY
CONDUCTIVE UNDERGROUND UTILITY
PIPE LINES

MEMORANDUM TO: MR. DEMPSEY D. WHITE
CHIEF CONSTRUCTION AND MAINTENANCE ENGINEER

MR. GRADY CARLISLE
TRAFFIC AND PLANNING ENGINEER

The Department's present policy, as stated in a memorandum to District Engineers dated 3/9/71, that requires the installation of approved detection wire or tape on all non-electrically conductive underground utility pipe lines remains in effect. This policy applies to all utility agreements and permits that authorize utility installations within the highway right of way. The policy is stated as follows:

"Any non-metallic or non-conductive (electric current) underground facility must be installed with a non-corrosive metallic wire or tape placed directly over and on the center of the facility for its entire length within highway right of way. This applies to both parallel installations and crossings. Wire or tape must be connected to all fixtures and appurtenances."

Specific requirements and specifications for the detection wire or tape are as follows:

1. The detection wire shall be neoprene insulated copper wire with wire diameter not smaller than No. 14 wire or stainless steel wire with the diameter not smaller than .041" diameter.
2. The metallic detection tape that may be used are those on the approved products list that is maintained by the Department's Materials Section. Tape that is not on the approved products list must be submitted to the Materials Section for approval prior to use.

3. The approved wire or tape selected shall be used throughout the project.

4. The wire or tape must be centered directly on top and attached to the pipe at least every fifty (50) feet of pipe length by approved methods. Wire or tape must be connected to all fixtures and appurtenances.

5. The utility companies may use, at their discretion, supplementary plastic warning tape of a non-metallic nature; however, this warning tape cannot replace the metallic system placed on the pipe line.

6. Utility companies applying for permits or entering into agreements with the Department, that will require a detection system, must include sufficient specifications and data so it can be determined if these policy and specification requirements will be met.

\signed\

A.B. RATCLIFF, JR.
CHIEF ENGINEER

The Fairfax County Board of Supervisors, Fairfax, Virginia
enacted on June 18, 1973 the following Code:

CODE GOVERNING EXCAVATION AND UTILITY LINE INSTALLATION

ARTICLE III. THE OPERATOR

Section 12. Excavation.

(d) When trenches excavated for the installation of gas pipelines are backfilled, a continuous tape shall be installed after tamping 18 inches above all direct burial plastic mains and 12 inches above services, stubs and stub extensions. The tape shall be not less than three (3) inches wide, brilliant in color and imprinted with words clearly defining the utility line as "GAS". The tape shall be impregnated with metal so that locating equipment can readily pick it up. The remainder of the backfill may then be placed.

Attachment
Exhibit E & F