

October 17, 1975

Mr. Roy H. Odom
Pyburn & Odom, Inc.
P.O. Box 267
Baton Rouge, LA 70821

Dear Mr. Odom:

Your letter of June 25, 1975, questions the practicality of the requirements for visibility of pipeline markers to be located at navigable waterways that is covered in Title 49 CFR Part 192, Section 192.707, as revised by Docket No. OPS-18; Amendment 192-20.

Please note that the visibility requirement does not state a fixed distance or position relative to the navigable channel but requires only that "the sign is visible and the writing required by paragraph (e)(2)(i) of this section is legible from approaching or passing vessels that may damage or interfere with the pipeline" (emphasis added). This requirement is compatible with the U.S. Coast Guard, Uniform Waterway Marking System Section 66.10, as discussed in the preamble to the amendment.

To further clarify the intent of marking at navigable waterways, the following is quoted from the U.S. Coast Guard Aids to Navigation Manual CG-222-3:

RANGE OF DAYMARKS

1. The nominal range of a daymark refers to a range somewhere between its detection distance and recognition distance in clear weather. Increasing amounts of information are conveyed by a daymark as a mariner approaches.
 - a. At the detection distance, the daymark will convey only the information of its existence; it will be just detectable from its background.
 - b. At the recognition distance the daymark can be recognized as an aid to navigation. At this distance the distinctive shape and/or color pattern are recognized.
 - c. At the identification distance the daymark can be identified as a particular aid. Identification is made possible by

being able to read the characters on the daymark. The identification distance of a

daymark in feet is approximately 40 times the character height in inches.

2. The detection, recognition, and identification distances depend upon the relative difference between the luminance of the daymark and that of the background, the position of the sun, and the meteorological visibility.

It is our opinion that the present performance language emphasizes the intended purposes of providing for pipeline safety while permitting needed flexibility to adjust to individual on-site conditions and any additional requirements of the U.S. Coast Guard, State, or other jurisdictions.

Thank you for your interest in pipeline safety.

Sincerely,

Cesar DeLeon
Acting Director
Office of Pipeline
Safety Operations

Mr. Joseph C. Caldwell, Director Subject: Title 49, CFR Subpart
Office of Pipeline Safety 192.707, paragraph (e) 400 7th S.W.
Washington, D.C. 20590

Dear Mr. Caldwell:

Reference is made to the subject paragraph which is entitled "Markers at Navigable Waterways".

We would appreciate your attention to the fact that the criteria for visibility and legibility contained in the subject paragraph for marker on navigable waterways are impracticable in the case of a large waterway. The specific problem with which we are confronted involves the required height of the letters and the distance from which they must be legible on warning signs for a pipeline crossing of a navigable waterway as large as the Mississippi River which is approximately 4,000 ft. wide. Assuming that the sign will be observed from mid-channel and based on the rule-of-thumb requirement given in the subject paragraph which states that "the distance in feet at which a sign may be read is 40 times the letter height in inches" the required letter height on the sign would be 50 inches. In order to display the words "Do Not Anchor Or Dredge", the sign would have to be approximately 40 feet wide which is unrealistically large.

We have observed that 14-inch high letters are easily legible by use of ordinary binoculars from midstream of the Mississippi River and it is our experience that the majority of commercial vessels are equipped with binoculars.

It is our opinion that the international orange border on the warning sign required by the subject paragraph would alert navigation to the presence of underwater pipeline crossings and that the required size of the lettering should not be so large as to necessitate the construction of a large structure to support the warning sign, but that the letters should be large enough to readily legible by use of binoculars.

Your review of these requirements in the light of these considerations will be greatly appreciated.

Very truly yours,

PYBURN & ODOM, INC.

Roy H. Odom
Executive Vice President