

PI-77-0103

February 23, 1977

Mr. Alex W. Gaines
Brown & Root, Inc.
P.O. Box Three
Houston, Texas 77001

Dear Mr. Gaines:

This responds to your letter dated October 5, 1976, in which you ask for an interpretation of 49 CFR 195.106 and 195.110.

Question 1: What Design Factor F is presently required in Paragraph 195.106?

Answer: At present, Section 195.106 requires a design factor F of 0.72 to be used in the design formula for determining the internal pressure of any new, replaced, or relocated pipeline with one exception. The exception is that a design factor F of 0.54 must be used for pipe that has been cold worked to meet specified minimum yield strength and is subsequently heated other than by welding to a temperature of 600 degrees Fahrenheit or more.

Question 2: What Design Factor F will be required August 1, 1977?

Answer: Beginning August 1, 1977, there are three applicable design factors under Section 195.106. In addition to the design factors of 0.54 and 0.72 mentioned in response to Question 1, a new design factor F of 0.60 must be used for pipe, including risers, on a platform located offshore or in inland navigable waterways.

Question 3: Do the above Design Factor F revisions affect the Paragraph 195.110, which refers to Paragraph 419 of ANSI B31.4?

Answer: No. The requirements of Paragraph 419 apply notwithstanding the amendment to Section 195.106.

Sincerely,
SIGNED
Cesar DeLeon
Acting Director
Office of Pipeline
Safety Operations

Brown & Root, Inc.
P.O. Box Three
Houston, Texas 77001

October 5, 1976

Mr. Joseph C. Caldwell, Director
Office of Pipeline Safety
Department of Transportation
Washington, D. C. 20590

Dear Mr. Caldwell:

Your interpretation of Title 49, Paragraph 195.106 and Paragraph 195.110 is respectfully requested concerning the following questions:

1. What Design Factor F is presently required in Paragraph 195.106?
2. What Design Factor F will be required August 1, 1977? Reference Federal Register 41, No. 157 - Thursday, August 12, 1976.
3. Do the above Design Factor F revisions affect the Paragraph 195.110, which refers to Paragraph 419 of ANSI B31.4?

Specifically,

- a. Is the allowable stress range - SA = .72 specified minimum yield?
- b. Are the sustained external loadings not to exceed .75 SA?
- c. Are occasional loads not to exceed 80 percent of specified minimum yield strength?

Your comments on the above will be gratefully appreciated.

Sincerely,
Brown & Root, Inc.
Alex W. Gaines