

June 23, 1978

Mr. James H. Thompson, Manager
LAVALCO Pipeline Products Division
P.O. Box 5604
Shreveport, Louisiana 71105

Dear Mr. Thompson:

Your letter of May 12, 1978, and the telephone call to you on June 1, 1978, by Paul Cory of this office raises the following question:

"If a weld fitting has been manufactured and marked in accordance with an appropriate specification which is listed in 49 CFR Parts 192 and 195, but is found to be made of steel with a higher yield strength than the SMYS to which it was manufactured and marked, may the actual higher yield strength be used for the design instead of the SMYS?"

In response to this question, your attention is called to §192.149, Standard fittings, paragraph (b), which states in part, "Each steel butt-welding fitting must have pressure and temperature ratings based on stresses for pipe of the same or equivalent material."

Section 195.118, Fittings, paragraph (c), states "The fitting must be suitable for the intended service and be at least as strong as the pipe and fittings in the pipeline systems to which it is attached."

The intent of these sections is that fitting strength be no lower than the strength of pipe of the same or equivalent material. In both §192.105, Design formula for steel pipe, and §195.106, Internal design pressure, it is required that the pipe design pressure be based upon the specified minimum yield strength. Thus, the specified minimum yield strength would be required to be used as the basis for determining the design pressure for weld fittings and not the actual measured yield strength.

Sincerely,

Cesar De Leon
Associate Director for
Pipeline Safety Regulation
Materials Transportation Bureau