

PI-74-0155

December 19, 1974

Mr. L.D. Broussard
Brown & Root, Inc.
Post Office Box Three
Houston, TX 77001

Dear Mr. Broussard:

This is further to our acknowledgement of your letter of August 22, 1974, and Mr. Thomas L. Cairns' letter of November 8, 1974, addressed to Mr. Frank Fulton. In both letters, Brown and Root has requested an interpretation of Section 195.208.

Section 195.208 states, "Supports or braces may not be welded directly to pipe that will be operated at a pressure of more than 100 psig."

Attachments such as anchors, supports, braces, etc., may not be welded directly to carrier pipe. However, attachments may be welded or bolted to a separate cylindrical member which completely encircles the pipe with the encircling member welded to the pipe by continuous circumferential welds.

Section 195.208 is more restrictive than USAS B31.4-1974, 421(d), in that Section 195.208 requires compliance to this section at an operation pressure of more than 100 psig where B31.4 does not state a pressure.

Your proposed design for Union Carbide Corporation would be in compliance with Section 195.208 as long as your pipe shoes completely encircles the pipe with the encircling member welded to the pipe by continuous circumferential welds.

If we can be of any further assistance in this matter, please advise.

Sincerely,
/signed/
Joseph C. Caldwell
Director
Office of Pipeline Safety

November 8 1974

Mr. Frank Fulton, Chief of Technical Division
Office of Pipeline Safety TES-32
400 7th St. Southwest
Washington, D.C. 20590

Dear Mr. Fulton:

Title 49 - Transportation, 195.110 External loads states that expansion and flexibility must be provided for according to USAS B31.4 and the pipe must be supported to avoid excess localized stresses. Furthermore, USAS B31.4 - 1974, 421 Design of Pipe Supporting Elements states that excessive local stresses should be avoided, nonintegral attachments such as pipe clamps and ring girders are preferred when they will fulfill the supporting and anchoring functions. It also states that when pipe is operating close to its allowable stress all connections welded to the pipe shall be made to a separate cylindrical member which completely encircles the pipe and this encircling member shall be welded to the pipe by continuous circumferential welds.

However, Title 49, 195.208 Welding of Supports and braces, states they may not be welded directly to pipe that will be operated at a pressure of more than 100 psig. Does this mean that in such cases connections can be welded to a separate cylindrical member which completely encircles the pipe with the encircling member welded to the pipe by continuous circumferential welds or is 195.208 more restrictive? And does 195.208 include anchors or just supports and braces?

Any assistance you could provide would be helpful.

Very truly your,
BROWN & ROOT, INC.
Thomas L. Cairns
Staff Specialist

Mr. L.D. Broussard
Brown & Root, Inc.
Post Office Box Three
Houston, TX 77001

Dear Mr. Broussard:

This is to acknowledge your letter of August 22, 1974, in which you give details of a piping system you are designing for the Union Carbide Corporation in Brownsville, Texas, and ask if your design is in compliance with Title 49, §195.28.

This matter is now under review by our office. You may expect a reply in the near future.

Sincerely,
/signed/
Joseph C. Caldwell
Director
Office of Pipeline Safety

Mr. Joseph C. Caldwell, Director
Office of Pipeline Safety
Department of Transportation
TES-30
Washington, D.C. 20590

Dear Sir:

As part of a project for Union Carbide Corporation in Brownsville, Texas, Brown & Root, Inc. is designing a piping system to transport no.6 fuel oil from a dock at the Port of Brownsville to the plant. Part of the line is above ground, steam traced and insulated. We propose to weld pipe shoes to the pipe and rest the shoes on support plates. At anchor points the shoes will be bolted, not welded, to the support plate. Is this design in compliance with Title 49, Paragraph 195.28 Welding of Supports and Braces?

Your prompt attention to this matter is appreciated.

Very truly yours,
BROWN & ROOT, INC.
L.D. Broussard