Mr. Robert V. Warrick, Secretary
ANSI Standards Committee B16
Standardization of Pipe Flanges,
Flanges, Fittings, and Valves
1815 North Fort Myer Drive
Arlington, Virginia 22209

Dear Mr. Warrick:

This is in response to your letter of September 8, 1972, concerning strength test requirements for components other than pipe as provided in 49 CFR, Section 192.505(d). In lieu of a strength test after installation that section permits certification that a component was tested to at least the pressure required for the pipeline to which it is being added. You have asked how the certification may be made for components manufactured to industry standards when the required pipeline pressure is not known at the time of manufacture. You have also asked what constitutes an appropriate quality control system under Section 192.505(d).

A certification meeting the requirements of Section 192.505(d) could be made in one of several ways. Where a component has been individually tested or manufactured under the required quality control system, the component itself could be marked with the manufacturer's name, specification to which manufactured, pressure rating, and test pressure to which the component (or prototype) was subjected. Alternatively the certification requirement could be met, for a qualified component, by a statement in the manufacturer's catalogue that the component, suitably identified, meets the requirements of an accepted industry standard.

As an example, API Standard 6D requires Class 300 valves (pressure rating 720 psig) to withstand a hydrostatic shell test of 1100 psig. An operator who needed to install a valve in an existing pipeline (class 3 location) which has a design pressure of 720 psig and was hydrostatically tested to 1080 psig (720 x test factor of 1.5 for a class 3 location), could install a valve purchased off the shelf, certified to API 6D, even though the valve was not manufactured with that particular installation in mind. As your letter recognizes, the operator is responsible for selecting and using a component that has been certified to a pressure at least as high as the test pressure for the pipeline in which it is to be installed.

With regard to an appropriate quality control system, the standard to be met is set forth in Section 192.505(d)(2). This is stated as a performance type requirement since it would be impracticable to set forth a detailed quality control system for each type of component being manufactured. However, an acceptable quality control system would consist of two basic elements: continuous

inspection by qualified personnel utilizing appropriate inspection equipment, and periodic testing (both mechanical and chemical) of materials going into the components.

I trust this answers your questions. If we may be of further assistance, please call on us.

Sincerely,

/signed/

Joseph C. Caldwell
Director
Office of Pipeline Safety

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