Mr. Cliff Donnelly
Engineer
Koch Industries, Inc.
P.O. Box 2256
Wichita, KS 67201

Dear Mr. Donnelly:

This is in response to Mr. Mark C. Swanson's letter of July 15, 1996. I understand Mr. Swanson is no longer with Koch. Mr. Swanson stated that 49 CFR Part 195 requires valves to be tested to at least the requirements of section 5 of API Standard 6D, "Specification for Pipeline Valves (Gate, Plug, Ball, and Check Valves)," and asked the following question:

> **"Is it possible under DOT 195 regulations to set a pipeline to have an MOP of 1480 psi by using class 600 flanged fittings and by using valves designed, manufactured, and tested to 1480 psi MOP, without increasing to class 900 valves?"**

The answer is "yes." The maximum operating pressure rating for standard Class 600 valves in API Standard 6D (6D) in an operating temperature range of -20°F to 100°F is 1440 psig. However, 6D provides for valves constructed of certain materials listed in Table 3.1 of 6D to be rated according to American National Standards Institute (ANSI) B 16.34 or ANSI B16.5. ANSI B 16.34 is entitled "Valves - Flanged and Butt Welding Ends" and ANSI B 16.5 is entitled "Pipe Flanges and Flange Fittings." In both ANSI B 16.34 and ANSI B 16.5, the pressure rating for Class 600 fittings in an operating temperature range of -20°F to 100°F is 1480 psig. These valves are called "alternate flanged end valves" (section 2.2 b of 6D) or "alternate weld end valves" (section 2.2 c of 6D).

Table 6.1 on 6D requires alternate valves to be marked with the class designation followed by "ALT," and the pressure rating at 100° F followed by the letters "MOP." In this case, the marking on each valve for visual identification would be "600 ALT" and "1480 MOP" respectfully.

Section 195.116 (d) require each valve installed in a pipeline to be both hydrostatically shell tested and hydrostatically seat tested without leakage to at least the requirements set forth in section 5 of API Standard 6D. For alternate valves, the testing requirements in section 5 of 6D

requires the hydrostatic test pressure to be 1.5 times the 100° F pressure rating (section 5.2) and the hydrostatic seat test to be 1.1 times the 100° F pressure rating (section 5.3).

I hope this fully answers your inquiry.

Sincerely,

Richard D. Huriaux
Director for Technology and Regulations
Office of Pipeline Safety

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cc: DPS-1,2,10,20,Regions,StateMailing
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