

Mr. William Barbeau, Director  
Mr. Ronald Wiest, Pipeline Inspector  
Minnesota Office of Pipeline Safety  
Market House - Room 130  
289 East Fifth Street  
St. Paul Minnesota 55101

Dear Sirs:

Thank you for your letter of August 4, 1989, requesting an interpretation of the pipeline safety regulations relating to service regulators and relief devices. We also appreciate the extensive backup material that you included with your letter.

It is important to remember that the sections in question appear in Subpart D - Design of Pipeline Components. The design requirements in this subpart apply to the design of a pipeline system or component to operate under conditions that are known or reasonably foreseeable **at the time of installation**. The subpart is not intended to place operators under a continuing obligation to monitor for variation from design conditions and to modify an original design to suit changes conditions, unless, of course, the operator is responsible for the changes conditions. Thus, as a customer is not bound to inform the operator about changes in end-use equipment ( e.g., a new stove), an operator is not bound to monitor the customer's equipment for changes and redesign its system or components to accommodate it. As you will see in the direct responses to your questions that appear below, this philosophy is central to most of the issues raised in your letter.

**Q1.** Definition and implication of the clause in 192.197(a)(5); "unsafe operation of any connected and properly adjusted gas utilization equipment."

**A1.** Unsafe operation of any connected and properly adjusted gas utilization equipment would create an usually high likelihood that personal injury or property damage would occur. For example, sufficient over pressure to create extremely high pilot light flames or pressures that would extinguish pilot lights and create the possibility of unrestrained gas accumulation would be unsafe operation.

**Q1.A.** Clarify whether or not the code requires the operator to periodically verify that all connected gas utilization equipment is properly adjusted.

**A1.A.** As discussed above, the design requirements do not make gas operators responsible for subsequent changes that are beyond their control. This, although the operator has

to meet the requirements of §192.195 in designing a customer service, the operator does not have to monitor the customer's equipment to verify the continuing appropriateness of the design. However, if an operator learns that its system is creating an unsafe condition, it must take appropriate action under §192.703(b).

**Q1.B.** Clarify whether or not the code requires the operator to select a "service regulator" that will deliver a pressure under no-flow conditions to below the rated maximum operating inlet pressure or below the pressure that would over pressure the appliance but not fail, as established by the manufacturer of the device or other testing agencies based on standards such as GAMA, ANSI, or AGA.

**A1.B.** Section 192.197(a) is a performance standard, meaning that it sets forth a determinable performance goal, but does not specify the means by which the operator must achieve that goal. The goal in this case is to prevent the "unsafe operation of any connected and properly adjusted gas utilization equipment." This does not readily translate into establishing equipment specifications as you suggest; compliance must be judged on the basis of all factors relevant to the safe operation of gas utilization equipment.

**Q2.** Definition and implication of the clause in 192.197(b); "unsafe over pressuring of the customer's appliance if the regulator fails." Clarify whether or not the code requires the operator to:

A. Establish this pressure within the rated maximum operating inlet pressure of such devices, or to a pressure below the elevated test pressure at which the device would not fail as establishing by the manufacturer of the device or other testing agencies based on standards such as GAMA, ANSI, AGA.

**A2.A.** As was the case with Question 1.B, the goal of the regulation is to ensure that the operator designs the service to prevent operation of the customer's equipment from significantly increasing the likelihood of personal injury or property damage. In practice this is usually accomplished by choosing a service regulator that limits the pressure to less than the failure pressure of the appliance regulator. Since there is no history of incidents resulting from over pressuring of appliances on services equipped with service regulators, it would appear that this is an appropriate means of compliance.

**Q2.B.** Continuously monitor the installation of gas utilization equipment in order to know what pressure would cause over pressuring of every specific gas utilization

equipment/appliance. If yes, does the operator have to visit each installation on a periodic basis?

**A2.B.** The operator is not responsible for monitoring the equipment that the customer installs subsequent to the initial installation and startup.

**Q3.** Interpretation of whether or not a service regulator is within code compliance when the operator says that it meets 192.197 (a) (1-6) characteristics, but has a relief device. this device is usually an internal relief device that limits the downstream pressure to a pressure level that could be over the maximum operating inlet pressure of the customer's appliance regulator, but below the elevated test pressure that would cause the customer's appliance regulator to fail.

Clarify whether or not the addition of an internal relief valve to a service regulator that meets all the requirements of 192.197 (a) (1-6) requires the operator to be judged under 192.197 (b).

**A3.** Section 192.197 states specifically that when a service regulator complies with the requirements of §192.197 (a) (1-6) **no other pressure limiting device is required**. Therefore, any relief valve installed in a service regulator that otherwise complies with §192.197 is installed at the discretion of the operator. Since its operation neither negates nor supercedes the operation of the complying service regulator, it is not subject to §192.197 (b). Finally, because the internal relief valve is discretionary, it is not subject to the requirements of §192.199.

I hope that this discussion has clarified for you the meaning and intent of §192.195, §192.197, and §192.199. If you have any further questions, please feel free to contact me.

Sincerely,

Richard L. Beam  
Director  
Office of Pipeline Safety

\*