To: **Fisher H282, H732 and H5112 Relief Valve Customer**

From: **Jim Griffin - Fisher Controls Product Safety Officer**

Subject: **IMPORTANT PRODUCT SAFETY APPLICATION NOTICE**
Types H282, H732 and H5112 (10/3/2005)

This product application notice addresses the potential for damage to H732, H282 and H5112 Series Relief Valves caused by their service environment.

Background

Fisher recently commissioned 3 outside metallurgical analyses to evaluate relief valve springs that cracked while in service to determine the root cause of the fractures. Two other LP industry organizations also commissioned independent tests. The results of the 5 independent studies indicate that the spring fractures were caused by stress corrosion cracking, resulting from the exposure to sulfur and/or chlorine in the service environment the valves were installed in. **The presence of contaminants including sulfur or chlorine may cause relief springs to break, adversely affecting system operation and reliability. Spring breakages can result in the unintended release of product and possibly result in personal injury, property damage, explosion, fire or chemical contamination.**

This notice is to remind transport and bulk storage relief valve users that these relief valves are UL listed for LP-Gas and Anhydrous Ammonia service. If the transport or bulk storage tank containing these relief valves is utilized in other services the relief valve materials of construction must be checked for compatibility with the service. In regards to the relief valves spring material, services with elevated levels of sulfur or chlorine will potentially damage the spring material and may induce stress corrosion cracking. This is stated in the Fisher Instruction Manual MCK-2104, H-Series Relief Valve Instruction Manual (Revision 01/03). The "WARNING" in the instruction manual states: **"If the valve is to be for service other than LP-gas or anhydrous ammonia, contact the factory to determine if the valve materials are suitable for the particular service." "Failure to do so could result in personal injury, property damage, explosion, fire or chemical contamination."**

If these relief valves are used in commercial propane service they should not be exposed to elevated levels of sulfur or chlorine, thus stress corrosion cracking should not be an issue. However, if the commercial propane being exposed to the relief valve is contaminated with compounds containing sulfur or chlorine the springs may be susceptible to stress corrosion cracking.

For all relief valves, no matter the service, periodic inspection, maintenance and replacement is recommended to ensure the safety of the installation as stated in the Fisher Instruction Manual MCK-2104, H-Series Relief Valve Instruction Manual (Revision 01/03). The instruction manual states: **"It is recommended that all relief valves be regularly inspected for visible damage, dirt, corrosion, missing raincaps, paint inside outlet, tampering, etc. If any of the preceding is evident or**

questionable, the valve should be retested and repaired if necessary or replaced immediately."

Action Required

For relief valves in service with potentially elevated levels of contaminants including sulfur or chlorine, schedule inspection and/or replacement. **If the valves show any signs of corrosion or contamination, the valves should be replaced.**

Fisher takes issues relating to product safety very seriously and while the above spring breakage amounts to less than 0.01% of the total installed base, Fisher believes that this Product Safety Application Notice will help to ensure safe storage and transportation of propane product. Fisher relief valves have worked well for many years in commercial propane service, but as with all Fisher products, they will continue to be evaluated and modified for use in their many applications and service environments to ensure that they provide the highest service quality in the industry.

If you have any questions, please contact your local Fisher LP Equipment distributor or contact Fisher directly by calling Ron Hartman at 972-548-3120.