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**From:** rrcwebcontact@gmail.com  
**Sent:** Monday, October 14, 2019 4:08 PM  
**To:** Rules Coordinator  
**Subject:** Comment Form for Proposed Rulemakings

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## Comments Form for Proposed Rulemakings

Date Submitted

Monday, October 14, 2019 9:08:09 PM

Submitted By

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Amend Chapter 9--HB 2714 (2019), NFPA updates, and other clarifications

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To whom it may concern:

I would like to formally provide my support for the adoption of the following amendments to Chapter 9 relative to the NFPA 58 rules as proposed by J Anderson of Gas Equipment Company:

1) Amend Section 9.143,(d)(7)(E)(i-ii) and Section 9.143,(d)(8) .....to allow use of an engineered safety breakaway riser (coupler) on bulkheads as an option to the 12 inch, schedule 80 nipple, which is NOT an engineered breakaway.

- Amend Section 9.143,(d)(7)(E)(i), to allow use of an engineered break-away safety system (coupler) to be utilized in lieu of the non-engineered scheduled 80 nipple. Per NFPA 58, Section 1.5 Equivalency, an engineered break-away safety system (coupler) allows enhancement of the minimum regulatory requirement as opposed to preventing use of enhanced, engineered safety equipment with a non-engineered requirement. The section should read as follows: (i) ....., a minimum 12-inch schedule 80 threaded (not welded) pipe riser (nipple) or engineered break-away coupler, and an elbow or other fitting between the bulkhead and hose coupling;
  - Amend Section 9.143,(d)(7)(E)(ii), to allow use of an engineered break-away safety system (coupler) to be utilized in lieu of the non-engineered scheduled 80 nipple. The section should read as follows; (ii).....; however, the minimum 12-inch length of schedule 80 threaded pipe riser or engineered break-away coupler, and an elbow or other fitting between the bulkhead and hose coupling are required;
  - Amend Section 9.143,(d)(8), to allow use of an engineered break-away safety system (coupler) to be utilized in lieu of the non-engineered scheduled 80 nipple. The section should read as follows; (8) In lieu of a minimum 12-inch nipple or engineered break-away coupler on a vertical bulkhead, swivel-type piping (breakaway loading arm) may be installed. The swivel-type piping shall meet all applicable provisions of the rules in this chapter. The swivel-type piping may also be used for loading, unloading, or product transfer, but shall not be used in lieu of ESVs. The swivel-type piping shall be installed and maintained according to the manufacturer's instructions.
- 2) Amend Section 9.126(d)(1)(A)(i) and Section 9.143,(a)(2)(A) and Section 9.143,(a)(2)(B) and Section 9.143,(a)(2)(C) to allow use of Electric fail-safe closed actuators on ESV's and Internal valves; by changing the language it will allow use of multiple proven enhanced safety technologies. To follow the intent of the Commission, an additional prohibition can be added to continue to restrict the use of cable actuation.
- Amend Section 9.126(d)(1)(A)(i), by adding "or electrically" between "pneumatically" and "operated"; should read as, (i) a pneumatically or electrically operated internal valve equipped for remote closure and automatic shutoff using thermal (fire) actuation where the thermal element is located within five feet (1.5 meters) of the internal valve;.....
  - Amend Section 9.126(d)(1)(D), by adding "or electrically" between "pneumatically" and "actuated"; should read as, (D).....which shall be pneumatically or electrically actuated and shall fail in the closed position.
  - Amend Section 9.126(d)(2)(B), by adding "or electrically" between "pneumatically" and "operated"; should read as, (B) a pneumatically or electrically operated internal valve with an integral excess-flow valve or excess-flow protection; or.....
  - Amend Section 9.143,(a)(2)(A), by adding "or electrically" between "pneumatically" and "-operated"; should read as, "(A) pneumatically or electrically operated emergency shutoff valves (ESV);"
  - Amend Section 9.143,(a)(2)(B), by adding "or electrically" between "pneumatically" and "-operated"; should read as, "(B) pneumatically or electrically operated internal valves;"
  - Amend Section 9.143,(a)(2)(C), by adding "or electrically" between "pneumatically" and "-operated"; should read as, "(C) pneumatically or electrically operated API 607 ball valves; or"
  - Amend Section 9.143,(g), by adding "or electrically" between "pneumatically" and "-operated"; should read as, (g) If necessary to increase LP-gas safety, AFS may require a pneumatically or electrically -operated internal valve equipped for remote closure and automatic shutoff through thermal (fire) actuation to be installed for certain liquid and/or vapor connections with an opening of 3/4 inch or one inch in size.
  - Remove reference of "pneumatic" from Section 9.143,(b)(1), it is unnecessary, as referenced in text in Remove reference of "pneumatic" from Section 9.143,(b)(2).
  - Remove reference of "pneumatic-operated" from Section 9.143,(b)(3), it is unnecessary.

- Remove reference of “pneumatic-operated” from Section 9.143,(b)(5)(C), it is unnecessary.
- Remove reference of “pneumatic” from Section 9.143,(c), it is unnecessary.
- Replace reference of “pneumatically-operated” from Section 9.143,(d)(2)&(3)&(4), with “pneumatically or electrically operated”.
- Amend/Remove references of “pneumatic” from sections where unnecessary. By reference in Sections 9.143,(a)(2)(A) and 9.143,(a)(2)(B) and 9.143,(a)(2)(C) the use of ESV’s and Internal Valves can be Pneumatically or Electrically actuated.
- The addition of “or electrically” could be detailed to “or electrically (fail-safe closed)”.

To quote Anderson’s justification:

"1) On bulkheads the stipulation that a riser must incorporate a minimum 12 inch schedule 80 nipple as a riser is a non-engineered specification. The amount of force to shear a 3/4 inch schedule 80 nipple versus a 3 inch schedule 80 nipple is very broad and is even worse when both a vapor and liquid connection exist during a pullaway. The use of an engineered safety break-away system (coupler) provides an assured sense of improved safety by documenting the amount of force that will be required to shear the breakaway in the event of a pullaway. The engineered breakaway coupler is designed specifically for this purpose, whereas a 12 inch schedule 80 nipple is just a piece of a transfer piping system, designed NOT to break. When the original rule was adopted, engineered breakaway systems apparently were not available, but are now, from multiple manufacturers. The original intent of the use of a minimum 12 inch schedule 80 nipple was to provide a weak link, albeit a non-engineered weak link. The current engineered breakaway systems (couplers) were designed/engineered for that very specific purpose. BUT, current language in the rule PROHIBITS the use of these engineered safety systems (couplers); it is time to revise the rule to ALLOW use of enhanced safety systems; NOT PREVENT/PROHIBIT their utilization. You don’t have to use them; but for those installations that want to, why prevent enhancing safety utilization?

2) In addition to the justification above, current language in safety regulations do NOT allow use of additional new enhanced safety equipment, but current rules PROHIBIT the use due to the specific language in the rule. Rules are meant to set a minimum safety standard, not a maximum level that prevents/prohibits the use of new and enhanced safety capabilities. It is time to amend rules to allow use of newer technologies which are allowed with the NFPA 58, Section 1.5 Equivalency section.

Manufacturers have developed new actuation capabilities for Internal valves and Emergency Shutoff valves incorporating electric fail-safe closed actuators; which can be interfaced with sophisticated safety control systems. These fully integrated safety control systems are being utilized in loading racks, processing/refining plants, bulk storage facilities and are finding their way into progressive independent marketer locations; but are prevented to be used in Texas with current restrictive regulatory language. In NFPA 58, the reference of “remote closure” is used that allows multiple types of actuation for ESV’s and internal valves; but Texas language restricts use of only pneumatic actuation. Fail-safe closed electrically actuated ESV’s and internal valves allow full integration into a sophisticated safety control system in lieu of having to piece-mill additional components and additional systems to provide overall integrated control and emergency shutdown; which adds more pieces to potentially fail, when needed.

The solution is as simple as editing the use of “pneumatically-operated” to “remote closure” used by NFPA 58 to

allow use of this or new UL-Listed enhanced safety equipment. I understand Rules are designed to require a MINIMUM safety standard; but the current nomenclature used in some of the Texas Safety rules end up accomplishing the opposite by RESTRICTING the use of enhanced safety equipment, such as the reference above. By stating "pneumatically-operated" it does not allow use of UL Listed electrically controlled fail-safe closed ESV's and Internal Valves; whereas the language in NFPA 58 "remote closure" does allow the utilization of this technology which can be interfaced into sophisticated safety control systems. An additional restriction prohibiting the use of cable actuation would preserve the original intent of the Commission when these rules were adopted twenty years ago. Or, just adding language to allow use of electric fail-safe closed actuated ESV's and internal valves is the option I proposed at the top.....I would prefer language similar to NFPA 58, but either strategy will work.

Respectfully submitted in an effort to enhance the overall safety of the LPG industry."

As a manufacturer of safety devices specific to hoses and coupling used in the gas industry, Smart-Hose Technologies agrees with Anderson that the current language is too limiting and does not allow operators to leverage use of new technology geared to improve safety. We therefore fully support the above amendments and respectfully submit our approval herein.

Sincerely,

Daylen Borders  
Sales Engineer  
Smart-Hose Technologies

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