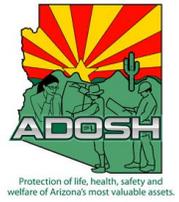




THE INDUSTRIAL COMMISSION OF ARIZONA

DIVISION OF OCCUPATIONAL SAFETY & HEALTH



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ARIZONA BOILER SAFETY POLICY MEMORANDUM

Manifolding atmospheric vents, gas vents, bleed or relief lines	Effective date → Retroactive

To: State & Special Inspectors, Owners, Users, Responsible Parties, Contractors, Installers, Suppliers
From: Randall Austin, Chief Boiler Inspector, (602) 542-1648
Date: November 29, 2011

This memo serves to clarify the requirements for manifolding atmospheric vents, gas vents, bleed and relief lines for all types of gas fuel trains. This would include boilers, water heaters and steam jacketed kettles within the jurisdiction of The Arizona Boiler Act (Title 23, Chapter 2, Article 11).

ASME CSD-1 (Controls and Safety Devices for Automatically Fired Boilers) and National Fuel Gas Code, NFPA 54, ANSI Z223.1 require all atmospheric vents, gas vent, bleed and relief lines to be vented separately unless manifolding is permitted by the authority having jurisdiction.

The Boiler Safety Section will permit manifolding, in accordance with accepted engineering practices set forth in ASME CSD-1, NFPA 54 and NFPA 85 as applicable.

Special care needs to be taken when manifolding atmospheric vents, gas vents, bleed and relief lines, some of these are;

1. Atmospheric vents shall never be connected to gas vents, bleed or relief lines. Some common atmospheric vents are diaphragm gas pressure regulators along with hi-low gas pressure switches.
2. The common vent line shall have a minimum cross-sectional area not less than the area of the largest vent line plus 50% of the areas of the additional vent lines.
3. Vents from boilers or HSRG's with fuel input ratings greater than or equal to 12,500,000 Btu/hr, falling within the scope of NFPA 85, Boiler and Combustion Systems Hazard Code, shall not be manifolded with vents from different boilers or HSRG's.
4. Vents shall not terminate in the flue or exhaust system.
5. Vent lines shall have a means to prevent water from entering the vent line along with a means to prevent blockage of vents by insects and foreign matter.
6. The vent line discharge shall be located so that there is no possibility of the discharged gas being drawn back into a structure through doors, windows, natural or forced draft vents or openings.

If there are any questions or concerns with this memo please do not hesitate to contact the Chief Boiler Inspector. Please see attached file for those sections of applicable codes.


Randall D. Austin, Chief Boiler Inspector