LEADERSHIP FOR THE BOILER INDUSTRY

Addressing Carbon Monoxide in the Boiler Room
Position Statement

Carbon monoxide (CO) is a poisonous, colorless, odorless, and tasteless gas that can cause injury and even death if not detected. Recent statistics share about 400 deaths and 10,000 hospitalizations each year from non-fire related CO incidents. High levels of CO are also an indication of poor combustion leading to inefficient operation and resulting in increased fuel usage and emissions.

The American Boiler Manufacturers Association (ABMA) and its member companies are committed to properly controlling CO in the boiler room to maximize boiler efficiency and reduce CO related illness and death.

In order to address the issues related to CO, ABMA is recommending the following.

1. All state and local governments adopt and enforce National Fire Protection Agency (NFPA 720). NFPA is an accredited code and standards developer that is required to reach consensus and encourages public input and comment period. NFPA 720 requires CO monitors in spaces where people may reside and in locations where CO may be generated including the boiler room.

2. All combustion start-ups use of a calibrated combustion analyzer to measure the Oxygen and CO. With this instrument, the proper fuel air ratio can be set and high CO levels can be detected and corrected prior to full operation. In addition to detecting dangerous CO levels, the analyzer allows the combustion to be set for more efficient operation, saving fuel and reducing emissions.

   In many cases, boiler end-users are not aware of installation issues until it is too late. Analyzing the combustion quality could also address issues like natural gas orifices for propane fuel and incorrect gas pressure which are seen too often by boiler technicians.

3. Installation of a CO sensor in the stack to detect CO levels with automatic shut-off or warnings if unsafe levels are reached.

Taking the precautions above will ensure a more efficient and safer boiler room.

Adopted by the ABMA Board of Directors
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