Kettle safety has been a priority topic for CRCA’s partnership with OSHA since the partnership’s inception. Over the course of more than a year, CRCA’s Safety Committee has been able to move OSHA from automatic citation to accepting a list of requirements for safe operation of a kettle on a roof.

Employers are responsible for the development and maintenance of an effective fire prevention program at the jobsite (OSHA Standard 1926.24). Now, specifically for roofing jobsites where a hot working roofing kettle is located on a roof surface, OSHA will require a jobsite safety assessment plan that includes the following points. (These types of kettles are being used to heat asphalt or coal tar, which is being used in a roofing assembly.)

Fire prevention program
• All workers should be trained in the specifics of the plan.

Location of the kettle
• Locate the kettle so the means of egress is not restricted. Ten feet of unobstructed egress is recommended.
• Keep combustible materials, including propane tanks stored for future use, away from the heat source for the kettle. Twenty feet is the recommended minimum distance. (The stored kegs of asphalt shall not be considered as combustible material.)
• The size and weight of the kettle must not exceed the structural capacity of the roof deck.
• The kettle must be placed on a noncombustible surface when the kettle is actively heating material. A method to contain uncontrolled spills of the heated material, which might be on fire, shall be determined. The placement of a fire retardant tarp under the roofing kettle, or some other means as determined by the company, shall be used. Secondary containment is not required when heating materials being used in a waterproofing assembly.

Kettle operations
• The individual assigned to operate the kettle must be trained in the proper operation of the kettle and have a knowledge of the material that is being heated so as to not allow the material to be heated beyond the temperature at which point it will catch on fire (flashpoint).
• The kettle shall be equipped with a working thermometer or the kettle operator shall have some other means that will allow him to determine the actual heated temperature of the material.
• The kettle shall be equipped with a quick closing valve at the spigot, and the kettle operator shall have in his possession some alternative means whereby he can reach the spigot handle in case of a fire at the spigot. This alternative method can be a longer handle on the spigot or an extension pole used by the kettle operator to close the spigot.
• When the kettle is heating material to the working application temperature, the kettle operator must be located on the same level as the kettle, be within eyesight and be within 25 feet of the kettle.

Fire extinguishers
• Two minimum 20-pound fire extinguishers shall be located within 25 feet of the working kettle.

Liquid propane containers
• The container being used as the heat source shall be kept at least 10 feet away from the kettle and shall be placed in an upright and secured in a position that will keep the container from tipping over.
• The number of containers that are being stored in anticipation of their use shall be limited to the amount that the company deems needed for two days of operating.