FEMA Says Don’t Perform a Full System Discharge Test Using Extinguishing Agent for Installation Approval of a Pre-Engineered Wet Chemical Restaurant Suppression System

The Fire Equipment Manufacturers' Association (FEMA) represents the industry's leading manufacturers of fire protection equipment. FEMA has a 60 year history of promoting fire safety through public education, community outreach, product testing, and code development. This advisory addresses our concerns regarding the practice of requiring a full system discharge test using extinguishing agent for a pre-engineered restaurant system installation approval.

FEMA advises against performing a full system discharge test using extinguishing agent on a pre-engineered wet chemical restaurant system unless required by the system manufacturer or by the Authority Having Jurisdiction, as long as the recharge procedures as outlined in the manufacturer's installation, maintenance and recharge manuals are followed. Years of field experience with this type of test has shown that the cost and unintended consequences far outweigh any benefit.

A full system discharge test using extinguishing agent can be problematic because it may increase the possibility of residual extinguishing agent in the discharge piping system following the test. Extinguishing agent that is not completely flushed from the piping after a discharge has the potential to cause corrosion and interfere with future system operation and performance. Improperly flushed discharge piping has proven to be one of the leading causes of improper system operation.

Additionally, a full system discharge test with agent is wasteful and places a considerable and unnecessary economic burden on the end user. As an alternative, the manufacturer's technical manual should be followed for the proper procedure for system installation approval. FEMA encourages the careful inspection of these systems by the Authorities Having Jurisdiction to verify that the installed system is in full compliance with the system manufacturer's technical manual.