NFPA 54 **FAOs**

Responses to FAQs are prepared by NFPA technical staff to assist users in reading and understanding NFPA codes and standards. The responses, however, are not Formal Interpretations issued pursuant to NFPA Regulations. Any opinions expressed are the personal opinions of the author(s), and do not necessarily represent the official position of the NFPA or its Technical Committees. In addition, the responses are neither intended, nor should be relied upon, to provide professional consultation or services.

1. What are the requirements for electrical area classification for areas where fuel gas piping is installed in buildings?

NFPA 54 has no requirements for electrical area classification. That means that there are no electrical area classification requirements for buildings in which fuel gas piping, both propane and natural gas are installed.

2. Can gas piping be run underground beneath a driveway?

Yes. Refer to paragraph 7 Yes. Refer to paragraph 7.1.2 which requires that underground piping be protected from damage by sufficient burial depth or covering the pipe with a protective cover. Usually, the pipe is placed in a larger pipe which spreads the loads and protects the gas carrying pipe.

3. Does NFPA 54 apply to Manufactured Housing?

Yes. The 1999 edition of NFPA 54 added a new section, 6.31 covering appliances in manufactured housing. It is applicable to appliances installed after the initial sale. The manufacture of manufactured housing is covered by a HUD standard in the United States, but the HUD standard is not applicable after the first retail sale of the unit.

4. Why has the requirement that water heaters installed in residential garages be installed so that the flame is at least 18" above the floor been removed from the Code?

The requirements for elevation of water heaters in residential garages so that the flame is at least 18" above the floor was removed in the 2002 edition because all listed residential water heaters were then required by the ANSI water heater standard to be resistant to the ignition of flammable vapors. The design of these newer water heaters is such that they will not ignite gasoline spilled on the garage floor they are installed on.

An inspector cites a restaurant for having a water heater installed in a kitchen with no vent to the outdoors. The vent terminates under a range hood. There is a solenoid valve installed in the gas line to the water heater that is wired through the range hood start button. Is the inspector correct?

Yes. NFPA 54, 7.2.3 permits ventilating hoods and exhaust systems to be used to vent gas appliances. As the vent system is a mechanical draft system, 7.3.4 applies, and 7.3.4 (d)

requires that provisions be made to prevent the flow of gas to the main burners when the draft system is not performing. Wiring the solenoid valve so that the hood start button must be on does not insure that the mechanical draft system is performing, so the inspector is correct. If a "sail switch" is installed in the hood vent, and the solenoid valve is wired through it, the installation meets the Code requirements.

6. Why was a new requirement for bonding of Corrugated Stainless Steel Tubing (CSST) added?

The committee was made aware of a number of incidents in which gas leakage from small holes in CSST were believed to be caused by lightning strikes near the building in which the CSST was installed. The committee was advised that bonding the gas piping system with a # 6 copper wire (or equivalent) would reduce the number of such failures in the future. The NFPA Research Foundation has additional work on the subject underway, and further changes may be made when the research is completed.