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Town of Brookhaven - Division of Fire Prevention

Fire Department Operation Bulletin: Automatic Carbon Monoxide Alarms in Commercial Buildings

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This bulletin is intended to provide guidance to fire department personnel when responding to automatic carbon monoxide alarms in commercial structures.

The Town of Brookhaven has adopted a robust carbon monoxide code, to protect both the occupants of all commercial buildings and responding fire and EMS personnel. As part of this code the installation of carbon monoxide detection systems are required in all new and existing commercial structures suitable for human occupancy. It is important to note that the Town of Brookhaven code is more restrictive, thus requires more, than the recently adopted State code.

Activation: Dispatch should receive the alarm as “carbon monoxide activation”, in some recent cases the central station has incorrectly given the information to the dispatcher as an “automatic alarm” or an “automatic fire alarm”, when in actuality it is a “carbon monoxide detection” activation.

It is important to note that code prohibits the activation of the fire alarm system audio and visual devices for carbon monoxide detection, even though the carbon monoxide detection is installed as part of the fire alarm system. Therefore the Division of Fire Prevention requires the following:

- 1) Due to the different abilities of the fire alarm panels based on manufacturer, age, etc. in all cases the fire alarm panel will indicate either a “Supervisory” or an “Alarm” condition. In either case it is imperative that the personnel either read the zone indicated on the panel and compare it to the posted zone list (for older panels) or read the digital display screen on the panel (newer panels), to determine the location of the activated carbon monoxide detector.
- 2) Each carbon monoxide detector is required to be equipped with a sounding base that will produce a temporal four (4) sound upon activation of said detector. It is important to note that in some cases the sounding will stop when the levels of carbon monoxide drop below the “alarm threshold” however in all cases the fire alarm panel will remain “latched” in alarm or supervisory trouble until reset.

Suggested onscene actions by fire department personnel:

First arriving unit should respond to the fire alarm control panel (FACP) to determine the type of alarm and the location of the activated detector.

Personnel with carbon monoxide metering equipment should then survey the area indicated, keeping in mind the carbon monoxide detector may or may not be sounding.

If carbon monoxide is detected by metering equipment, follow your department SOP/SOG.

If carbon monoxide is not detected it is recommended that the system is reset, to allow the HVAC units to operate and determine if carbon monoxide levels again increase. This will allow your personnel to determine the cause, i.e. malfunctioning HVAC equipment.

It is important to note that the HVAC systems are required (with few exceptions) to shut down upon the activation of a carbon monoxide detector. Therefore if the area of activation is well vented such as in the case of a commercial cooking establishment, where the cooking exhaust fans will continue to operate, no carbon monoxide may be detected until the HVAC is again operating, if the HVAC system is the source.

It is always suggested that fire department personnel attempt to reestablish all conditions that were present at the time of activation.

Fire Marshal Notification:

Elevated levels of carbon monoxide present, unable to determine cause: Request immediate Fire Marshal response.

Elevated levels of carbon monoxide present, cause determined, unable to isolate offending unit, owner or occupants not cooperating. Request immediate Fire Marshal response.

Elevated levels of carbon monoxide present, persons with suspected carbon monoxide poisoning. Request immediate Fire Marshal response.

Elevated level of carbon monoxide present , cause determined, offending equipment shut down or process corrected: Make non emergency notification via Fire Marshal App, (Fire Marshal will follow up next business day).

Non elevated levels of carbon monoxide present, appears to be malfunction / false alarm: Make non emergency notification via Fire Marshal App, (Fire Marshal will follow up next business day).

Any additional questions should be directed to the Division of Fire Prevention at (631) 451-6262.