

Standard Operating Guidelines

CARBON MONOXIDE HAZARDS

Guideline # 310.11

Date: 7/07 R

PURPOSE

To establish a guideline for responding to, locating and mitigating carbon monoxide hazards.

POLICY

The Fire Department shall respond to and investigate all reports of possible carbon monoxide incidents occurring in occupied spaces.

GENERAL

Carbon Monoxide (CO) is an odorless, colorless and tasteless gas that is deadly. It is a by-product of combustion. Many appliances such as furnaces, kitchen stoves, hot water heaters, automobiles, etc., can produce carbon monoxide. When a faulty device or unusual conditions exist, carbon monoxide may be vented into areas where people are present. Carbon Monoxide poisoning may be difficult to diagnose. Its symptoms are similar to that of the flu, which may include headache, nausea, fatigue and dizzy spells for low levels and convulsions, unconsciousness, and death for high levels.

RESPONSE PROCEDURES

Response to carbon monoxide alarms will depend upon information received in the initial dispatch message, and/or from updates received from other agencies that may also be responding to the alarm.

1. Carbon monoxide detector activated- occupant(s) complain of flu like symptoms:
Emergency Response Is Indicated
2. Carbon monoxide detector activated- no medical symptoms of occupant(s): **Routine Response Is Indicated**
3. Any time an Officer feels the caller is in jeopardy, he/she can immediately initiate an emergency response, even if the initial dispatch was considered non-emergency.

PROCEDURES

1. The first arriving company shall establish command as per the National Incident Management System.
2. A team of at least two firefighters with proper protective equipment and a CO meter shall be prepared to investigate the alarm.
3. Attempt shall be made to verify that the alarm is coming from a smoke detector or a CO detector.
3. If it is a smoke detector alarm:
 - a) Advise responding units of the situation.
 - b) Take necessary action.
4. If it is a CO detector alarm:

- a) Determine if any occupants of the structure, including any adjoining structures within a complex, are exhibiting any symptoms of carbon monoxide poisoning, if so immediately evacuate the premises.
 - b) If the CO meter should trigger an alarm, adjoining structures should also be evacuated until deemed safe.
5. Request and/or confirm necessary EMS response.
 6. Direct evacuees to a secure location.
 7. Begin investigation of CO alarm.
 8. If no one exhibits any symptoms of carbon monoxide poisoning, it shall not be necessary to evacuate or ventilate the premises unless a level of over 9-PPM is detected.
 9. All firefighters shall use SCBA in any atmosphere that is more than 35 PPM of CO
 10. The Incident Commander shall request that the gas company respond to the scene if any one or more of the following situations is present:
 - a) A CO level of over 9 PPM is detected or
 - b) A gas appliance is shut off or
 - c) Occupants show signs or symptoms of being ill due to CO or
 - d) The IC feels a response by the Gas Company is warranted.

Investigation Guidelines:

1. Zero the meter(s) in fresh air and comply with all other startup guidelines as recommended by the manufacturer of the metering equipment.
2. Initiate a survey of the premises to determine if there are any levels of CO above 9 PPM present.
3. Readings of 9 PPM or less:
 - a) Inform the occupants that the instrument(s) did not detect an elevated level of CO at this time.
 - b) Recommend that the occupants check their CO detector per manufacturer recommendations.
 - c) Attempt to reset detector.
 - d) Inform occupants that if it activates again, call 9-1-1.
4. Readings greater than 9 PPM:
 - a) Any readings greater than 9 PPM but less than 100 PPM shall be considered above normal readings.
 5. Any readings of 100 PPM or greater shall be considered a potentially lethal Level of CO.
 - a) Order the occupants to leave the premises immediately.
 - b) If it can be determined that an appliance is malfunctioning, and thereby producing CO, it shall be shut down.
 - c) Begin ventilation utilizing electric fans or PPV fans as negative pressure ventilation.
 - d) Once the premises has been reduced to a safe level of CO, the premises may be occupied at the discretion of the occupant.
 - e) Attempt to reset the CO detector.
 - f) Request the response of the Gas Company.
6. Complete the Carbon Monoxide Detector Activation Notice of Findings. Forms are found in each truck.
7. Inform occupants:
 - a) To call 9-1-1 again if alarm activates again.
 - b) Of action that has been taken place.
 - c) That gas company has been requested to respond.
 - d) Have occupant(s) sign the Notice of Findings and explain it.

DEVIATIONS

This policy acts only as a guideline to follow. If situations do not fit within these parameters then the Incident Commander (or company officer) at the scene shall have the authority to deviate as necessary to deal with the situation as they see fit.

Approved:

Date:

District Chief:

Date:

Company Chief

