

#### 4.25 Carbon Monoxide Incidents

Scope-When an alarm is received for a carbon monoxide (CO) detector going off, a single unit response (5371) will respond non-emergency unless a rescue situation is present. The following guidelines shall be used to handle carbon monoxide emergencies:

1. Enter structure in full protective clothing including S.C.B.A. with the gas monitor. (The monitor should have been zeroed and set-up inside a clean air environment no vehicle fumes). Verify that the alarm is a carbon monoxide detector not a smoke or combustible gas alarm.
2. If it is determined to be a smoke or combustible gas alarm, S.O.G.s for the appropriate situation shall be followed. If it is a carbon monoxide detector:
  - A. Determine if anyone exhibits any symptoms of carbon monoxide poisoning (symptoms may include but not limited to: headache, nausea, fatigue, dizzy spells or impaired judgment).
  - B. If no one exhibits any symptoms of carbon monoxide poisoning, check the interior to get a P.P.M. carbon monoxide reading. Use the carbon monoxide information checklist to guide your inspection.
  - C. Be sure the structure is evacuated and start the investigation procedure with only 2-3 firefighters.
3. Monitor readings of below 10PPM, 10PPM and above, and greater than 100PPM
  - A. If the monitor has a reading of less than 10PPM, this is the level established by the Environmental Protection Agency as a "not to exceed in an 8 hour period".
    - a. Determine possible sources for any carbon monoxide readings.
    - b. If it is determined that low levels of carbon monoxide are from an appliance, the occupants should be informed that they should contact a reputable service company and have their appliance checked.
    - c. Attempt to reset the carbon monoxide detector.
    - d. Advise the occupants to call 911 if the alarm reactivates.
    - e. If it is determined that the problem is most likely a defective detector, offer a GFD replacement (single family dwelling only) carbon monoxide detector to the occupants. A replacement carbon monoxide detector should be located on 5371 for this purpose. If a replacement carbon monoxide detector was given out, ensure that a new replacement is requested from the department office.
    - f. Have the occupant sign and keep a copy of the carbon monoxide checklist.
    - g. Remind residence that in effect is an updated law that requires carbon monoxide detectors in each level of the home.
  - B. If the monitor has a reading of greater than 10PPM but less than 100PPM:
    - a. Inform the occupant that potentially dangerous levels of carbon monoxide have been detected.
    - b. Set up ventilation utilizing electric ventilation fans (no gas powered fans) to bring carbon monoxide to safe levels.
    - c. Determine possible sources for any carbon monoxide readings.
    - d. If it is determined that an appliance is malfunctioning, shut it off.
    - e. Once the appliance has been shut off, monitor the structure for carbon

monoxide levels. If the levels remain below 10PPM inform the occupant to contact a reputable service company and have their malfunctioning appliance repaired.

f. Notify the gas company if necessary.

g. Once levels in the occupancy have been brought down to safe levels and the source of the carbon monoxide has been made safe, the occupant has the discretion to stay on the premises.

h. Attempt to reset the carbon monoxide detector.

i. Advise the occupant to contact 911 if the alarm reactivates.

j. Have the occupant sign and keep a copy of the carbon monoxide checklist.

C. Monitor readings of 100PPM or greater:

a. Any readings of 100PPM or greater are considered to be potentially lethal levels of carbon monoxide.

b. Set up ventilation utilizing electric ventilation fans (no gas powered fans) to bring carbon monoxide to safe levels.

c. Determine possible sources for any carbon monoxide readings.

d. If it is determined that an appliance is malfunctioning, shut it off.

e. Once the appliance has been shut off, monitor the structure for carbon monoxide levels. If the levels remain below 10PPM inform the occupant to contact a reputable service company and have their malfunctioning appliance repaired.

f. Notify the gas company if necessary.

g. Once levels in the occupancy have been brought down to safe levels and the source of the carbon monoxide has been made safe, the occupant has the discretion to stay on the premises.

h. Attempt to reset the carbon monoxide detector.

i. Advise the occupant to contact 911 if the alarm reactivates.

j. Have the occupant sign and keep a copy of the carbon monoxide checklist.

Full protective clothing including SCBAs should be worn by all personnel who enter the structure to check for carbon monoxide gas. The equipment should continue to be worn until it is determined through monitoring that no hazards exist and the atmosphere is safe for breathing without SCBAs.