

Alton Fire & Rescue Department Standard Operating Guidelines (SOG)

SOG 2.3.1 Response to Carbon Monoxide Alarms (Reference SOP 2.3.1)

PURPOSE: To insure the safe and effective response to reports of carbon monoxide (CO) incidents.

SCOPE: Any response involving a report of carbon monoxide.

SPECIFICS:

- Carbon monoxide is an odorless, tasteless, colorless gas that is deadly. It is a by-product of a fuel burning process. Many appliances such as furnaces, kitchen stoves, hot water heaters, automobiles, etc. can produce carbon monoxide.
- When a faulty or unusual condition exists, carbon monoxide may be vented into areas where people are present. Carbon monoxide poisoning may be difficult to diagnose. Its symptoms are similar to the flu, which may include headache, nausea, fatigue and dizzy spells.
- O.S.H.A. has established a maximum safe working level for carbon monoxide at 35 parts per million (PPM) over an 8-hour period in the general workplace. The US Environmental Protection Agency has established that residential levels are not to exceed 9 PPM over an 8-hour average.

DATE: Approved: 1/9/06 Revised November 24, 2009

Alton Fire & Rescue Department

Standard Operating Guidelines (SOP)

SOP 2.3.1 Response to Carbon Monoxide Alarms

PURPOSE: To insure the safe and effective response to reports of carbon monoxide (CO) incidents.

SCOPE: Any response involving a report of carbon monoxide.

SPECIFICS:

METERS:

- Alton Fire & Rescue will supply carbon monoxide meters.
- The carbon monoxide meters will be kept on the first response apparatus.
- The meters shall be used to monitor the atmosphere during any suspected carbon monoxide investigation.
- Alton Fire & Rescue will also provide the testing and periodic re-calibration and maintenance of all CO gas meters as per the manufacturer's recommendations.

SCENE:

- The first arriving officer shall establish scene control as per incident command procedure.
- Full turnout gear and SCBA shall be worn until determined otherwise by Incident Command.
- Verify that the alarm is coming from a carbon monoxide detector or a smoke detector. Determine the cause of the alarm, i.e. true alarm, low battery indication, poor location of the device.
- If from a carbon monoxide detector, CO meters will be deployed.
- If a level of over 9-ppm is detected, the building will be evacuated.
- Determine if anyone is exhibiting any symptoms of carbon monoxide poisoning. If so immediately evacuate and ventilate the premises. Then begin to investigate the cause.
- If no one exhibits any symptoms of carbon monoxide poisoning, it is not necessary to evacuate or ventilate the premises and the ambulance can go in-service, unless a level of over 9-ppm is detected.

CARBON MONOXIDE INVESTIGATION PROCEDURES:

- Zero the meter in fresh air and comply with all other start up procedures as recommended by the manufacturer of the metering equipment.
- Initiate a survey of the premises to determine if there are any amounts above 9 ppm of carbon monoxide present.
- **All Department members shall use SCBA in any atmosphere that is in excess of 35 ppm of carbon monoxide.**

READINGS OF 9 PPM OR LESS:

- Inform the occupants that our test instrument did not detect an elevated level of carbon monoxide at this time.
- Recommend occupants check their CO detector per manufacturer recommendations.
- Attempt to reset the detector.
- Inform the occupants to call again if the detector reactivates.

READINGS OF MORE THAN 9 PPM BUT LESS THAN 100 PPM:

- Any readings above 9 ppm shall be considered above normal reading.
- Occupants shall be informed that we have detected a potentially dangerous level of CO.
- All persons should leave the premises. Begin ventilation,
- If it is determined that an appliance is malfunctioning and thereby producing CO, it shall be shut down.
- Once the premises have been reduced to safe level of CO, the premises may be reoccupied at the discretion of the occupant.
- Attempt shall be made to reset the detector
- Inform the occupants to call again if the detector reactivates.

READINGS OF 100 PPM OR GREATER:

- Any reading of 100 ppm or greater inform the occupants that we have detected a very lethal level of CO.
- Order the occupants to leave the premises immediately.
- If determined that an appliance is malfunctioning and thereby producing CO, it shall be shut down.
- Once the premises have been reduced to safe levels of CO, the premises may be occupied at the discretion of the occupant.
- Attempt shall be made to reset the detector.
- Inform the occupants to call again if the detector reactivates.

DATE: Approved: 1/9/06 Revised November 24, 2009