



<b>Standard Operating Guideline</b>	
<b>SOG Name:</b>	<b>Responding to CO Alarms</b>
<b>SOG Number:</b>	<b>150.2</b>
<b>Standard:</b>	TBD
<b>Guideline Owner:</b>	Emergency Operations – Special Operations
<b>Implementation Date:</b>	October 31, 2000
<b>Date of Last Revision:</b>	May 21, 2021
<b>Authority:</b>	Larry H. Williams, Jr, Fire Chief

**PURPOSE:** To safely and accurately evaluate a possible enclosed hazardous environment with regards to life safety, monitoring, eliminating, and documenting any hazard due to conditions brought about by carbon monoxide.

**A. TRAINING**

**SECTION 1**

Personnel should know how to operate and accurately read all CO detection equipment assigned to their companies.

**SECTION 2**

Personnel should know the minimum and maximum exposure levels of CO as identified by the Consumer Products Safety Commission (CPSC) and the Occupational Safety and Health Administration (OSHA). The OSHA Permissible Exposure Limit (PEL) is 50 parts per million (PPM). OSHA standards prohibit worker exposure to more than 50 parts of the gas per million parts of air averaged during an 8-hour time period. Recommended maximum exposure levels are categorized as Immediately Dangerous to Health and Health (IDLH) = 1200ppm. Flammable Limits are 12.5% - 74.2% (120,000 – 742,000 ppm), with an auto-ignition temperature of 1,128 degrees Fahrenheit. Document all exposure level readings in your run report narrative.

**SECTION 3**

Personnel should be familiar with different types of CO detectors for the purpose of troubleshooting and occupant information.

**B. INCIDENT RESPONSE**

**SECTION 1**

This is a Level I Response. Each responding ALS Engine Company is equipped with a 4 (four) gas Q-Ray monitor that reads Oxygen (O2), Hydrogen Sulfide (HS), Lower Explosive Limits (LEL), and Carbon Monoxide (CO). The Incident Commander may request Hazmat 2 to respond at his discretion.

**SECTION 2**

Priority should be given to determining if there are any possible illnesses associated with the incident. Assess any illness and render emergency medical treatment, if needed.

**SECTION 3**

Simultaneous with treating any illness, the structure should be completely evacuated and occupants should not be allowed to re-enter until all monitoring is completed and safe conditions are determined.

**SECTION 4**

Personnel shall don SCBA and a meter reading shall be taken prior to entering the structure. Before any ventilation or reading, Q-Ray should be allowed to run through its fresh air calibration phase away from the contaminated area. Record initial readings inside the structure, taking into account the IDLH and Flammable Limits. Determine the source of the problem by monitoring near any common source of CO; Gas stove, dryer, garage, furnace, fireplace, etc. Begin ventilation, keep in mind that natural ventilation is preferred, since PPV fans introduce CO. The use of electric fans is also an option when dealing with high levels of concentration. Continue monitoring and contact the appropriate utility company (example – Southeast Gas District).

**SECTION 5**

If no CO readings are attainable and an in-home CO detector has alarmed or continues to alarm, “reset” the detector if applicable. If no “reset” is available and the detector is activating, refer to the manufacturer’s recommendation or install a new detector. Advise the occupants to allow fresh air exchange within the structure until the CO detector is operational.

**(Signature on File)**

**Larry H. Williams, Jr.**

Fire Chief

DOTHAN FIRE DEPARTMENT