

# ALBANY COUNTY FIRE DISTRICT 1

## Carbon Monoxide Response

### Standard Operating Guidelines (SOG)

#### **Purpose:**

This establishes a procedure for Albany County Fire District 1 (ACFD1) response to reports of Carbon Monoxide (CO) incidents.

#### **General:**

Carbon Monoxide (CO) is an odorless, tasteless, colorless gas that is deadly. It is a by-product of a fuel burning process. Gas operated appliances such as furnaces, kitchen stoves, water heaters, automobiles, etc. will naturally produce carbon monoxide. When a faulty condition exists, carbon monoxide may be vented into areas where people are present. Faulty wood burning fireplaces can produce same CO problems as gas appliances.

Carbon Monoxide poisoning may be difficult to diagnose, its symptoms are similar to the flu, which may include headache, nausea, fatigue, and dizzy spells.

The Occupational Safety and Health Administration (OSHA) has established a maximum safe working level for Carbon Monoxide at 50 parts per million (PPM) over an eight (8) hour period in the general workplace. The U.S. Environmental Protection Agency (EPA) has established that residential levels are not to exceed nine (9) parts per million (PPM) over an eight (8) hour average.

The appropriate gas company for the area will be contacted only if the initial call received indicates that someone is ill or if the Fire Department requests that they respond to the scene.

#### **Response:**

The dispatcher shall in all reports of an alarm call, attempt to verify if the alarm that is sounding is a smoke detector or a carbon monoxide detector. If the alarm is from a smoke detector, a structural assignment shall be dispatched.

When a call is received and the information dictates a Carbon Monoxide Incident, the Laramie Fire Department (LFD) and associated ACFD1 department shall be notified. The type of response from the Laramie Fire Department will be dictated by the information received.

1. Carbon Monoxide detector activated- occupant(s) complain of flu like symptoms:

**Emergency Response is indicated. (LFD Engine and MS Unit) (ACFD1 units)**

2. Carbon Monoxide detector activated- no medical symptoms of occupant(s):  
**Routine Response is indicated. (Auxiliary LFD unit with 1 personnel and CO air monitor and EMS CO/O2 monitor) (ACFD1 unit/s)**

### **Arrival at Scene:**

Regardless of the response, the following procedure is established: (At any time as information dictates, resources can be requested or cancelled)

1. First arriving unit personnel shall establish scene control and Incident Command
2. Interview occupant(s):
  - verify any symptoms associated with event
  - obtain any potential sources of CO problem
  - verify location of CO detector within structure
  - obtain any other pertinent information required for investigative purposes

### **Investigation Survey:**

A Carbon Monoxide meter shall be used to survey the premises and verify the presence of Carbon Monoxide. The responding personnel shall perform this survey, even if the occupancy CO detector is in the low battery mode.

**If a Carbon Monoxide detector is in alarm mode the following procedures will be performed:**

- **If anyone is exhibiting any symptoms of carbon monoxide poisoning, immediately evacuate and ventilate the premises.**
  1. Request EMS and any additional fire service resources needed for mitigation.
  2. Investigate for cause.
  3. Call for appropriate gas company assistance.
- **If no one exhibits any symptoms of carbon monoxide poisoning the following shall apply:**  
**A reading of 9 PPM or less does not require the evacuation of the premises.**

1. Recommend the occupants check their CO detector per manufacturer recommendations.
2. Attempt to reset the detector.
3. Inform the occupant that if the detector activates again to call 911.

➤ **Any reading above 9 PPM but less than 100 PPM shall be considered above normal, and potentially dangerous to the occupants.**

1. Recommend that all occupants leave the premises and begin ventilation.
2. If the CO level is greater than 50 PPM all personnel shall use SCBA to continue mitigation process.
3. Determine the source of the CO and shut down the appliance.
4. Once the premises have been reduced to a safe level of CO, the premises may be occupied at the discretion of the occupant.
5. Attempt to reset the detector.
6. Inform the occupants that if the detector activates again to call 911.
7. Inform the occupants of the action that has taken place and that the appropriate gas company has been requested to respond.

➤ **Any reading of 100 PPM or greater.**

1. Order the occupants to leave the premises immediately.
2. Use of SCBA required to continue mitigation.
3. Determine the source of the CO and shut down the appliance.
4. Ventilate the structure and reduce the CO to a safe level.
5. Once the CO level is safe the structure may be occupied at the discretion of the occupant.
6. Inform the occupants of the action that has taken place and that the appropriate gas company has been requested to respond.

**Documentation:**

All investigative findings and resulting actions shall be documented as per responding agencies protocols.