# TOWN OF WATERTOWN FIRE DEPARTMENT STANDARD OPERATING GUIDELINES

**SECTION:** Firefighting

**SUBJECT:** Carbon Monoxide Hazards

**REVISED: 7/2013** 

#### **PURPOSE:**

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

#### **POLICY:**

The fire department shall respond to and investigate all reports of possible carbon monoxide incidents 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, stoves, hot water heaters, 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 headaches, nausea, fatigue, and dizzy spells for low levels, and convulsions, unconsciousness, and death for high levels.

## **RESPONSE:**

The response for carbon monoxide calls should be:

- 1. Pumper/rescue.
- 2. Rescue
- 3. Pumper if requested.

#### **PROCEDURES:**

- A. Priority one or priority two responses to reports of carbon monoxide shall be determined by the following criteria:
  - 1. Priority one responses Caller indicates or suspects any sign or symptoms or carbon monoxide poisoning. In this event, have dispatch advise the caller and all occupants to evacuate the building and await the fire departments arrival.
  - 2. Priority two responses Caller has a carbon monoxide detector activation or suspects there may be carbon monoxide present in the building.
  - 3. All priority one responses shall require full protective clothing and SCBA.
  - 4. All priority two responses shall require full protective clothing but no SCBA unless the situation calls for them.
- B. Once the fire department arrives on the scene, they should first interview the occupant to determine the following:
  - 1. If any occupant s are or have been feeling ill.
  - 2. The number and location of any co detectors which have been activated.
  - 3. The location of combustion equipment/appliances.

NOTE: This interview should take place outside of any suspected contamination areas.

- C. After the interview, zero the co meter in fresh air and comply with all start up procedures as recommended.
- D. Take the first reading just inside the doorway to determine initial co levels. If a reading of 35ppm or greater is detected, the building or effected area shall be evacuated immediately and full turnout gear and SCBA shall be utilized during the investigation.
- E. Personnel shall begin monitoring the lower levels of the building, then proceed to hight levels.
  - 1. Be sure to check all areas especially areas that include utility spaces, kitchens, and attached garages.

NOTE: The gas company is an important resource during co investigations, they will be notified anytime the gas has to be shut off and if high readings are detected, and unable to pinpoint the cause.

- 2. Appliance service personnel should be contacted by the occupant to check operation of appliances.
- F. If a reading of 9ppm or less is detected:
  - 1. Inform the occupant that our instrument did not detect an elevated level of co at this time.
  - 2. Recommend occupants to check their co detector per manufacturers recommendations.
  - 3. Advise the occupant to reset the co detector according to the manufacturers instructions.
  - 4. Inform the occupant that, if the detector reactivates or they feel there may be a problem to call 911 anytime.
- G. If a reading above 9ppm and below 35ppm is detected:
  - 1. Any reading above 9ppm shall be considered an above normal reading.
  - 2. Occupants shall be informed that an elevated level of co has been detected.
  - 3. If it is determined that an appliance is malfunctioning and thereby producing co, it shall be shut down and the gas company notified.
  - 4. Once the premises has been ventilated and reduced to a safe level of co, it may be occupied, at the discretion of the occupant.
- H. If a reading of 35ppm or greater is detected follow the same procedures as in section G. Advise occupants of findings and further actions which may be necessary.