

Tully Hose Co. #1

Standard Operating Guidelines

CARBON MONOXIDE (CO) EMERGENCIES

Guideline # TF-300 – Rev.1

PURPOSE

This is to establish the guidelines for the personnel of the Tully Fire Department to handle those incidents involving the investigation of an accumulation of carbon monoxide.

GENERAL

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 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 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 **35 parts per million (PPM)** over an eight hour period, in the general workplace. The U.S. Environmental Protection Agency has established that **residential levels are not to exceed 9 PPM** over an eight-hour average. Commercial buildings have many sources of CO not found in residences such as parking garages, drive-through windows, auto repair bays, various “processes”, un-vented gas burners in large confined spaces, forklifts, etc. Recognizing this OSHA established **35 PPM as the acceptable level for commercial buildings.**

PROCEDURES

DISPATCH

- 1) Upon receiving alarm engine 14 responds to all CO detector activations in the Tully fire district.
- 2) If no persons at the scene are exhibiting symptoms of CO poisoning, respond to scene no lights and sirens.
- 3) If persons at the scene are exhibiting symptoms of co poisoning, response to scene lights and sirens.

ON SCENE

- 1) All firefighters are to report to incident command for assignment and staging.
- 2) The I/C determines if anyone is exhibiting any symptoms of CO poisoning. If so, immediately evacuate premises (in adverse weather conditions the occupants of the residence can wait in the rescue while residence is being checked).
- 3) The I/C will question the occupants of any possible CO emitting appliances (ie. Furnaces, kitchen stoves, hot water heaters, heating stoves, automobiles etc.).
- 4) The I/C shall have an officer (if possible) and 2 firefighters wearing full PPE and SCBA's, enter building.

- 5) Keep windows and doors closed until house is checked completely. If reading in excess of **35 PPM** of CO is detected **SCBA's MUST BE WORN. NOTE: AN ALARMING DETECTOR IS ASSUMED TO BE CORRECT UNTIL DETERMINED OTHERWISE.**
- 6) Reading of 9 PPM or less:
- Inform the occupants that our investigation did not detect any elevated level of CO at this time.
 - Recommend occupants check their CO detector per manufacturer recommendations.
 - Attempt to reset detector.
 - Inform occupants that if detector activates again to call 911.
- 7) Reading of more than 9 PPM, but less than 100PPM:
- Any reading equal to or greater than 9 PPM will be considered above normal reading.
 - Occupants will be informed that we have detected a potentially dangerous level of CO.
 - Recommend that all persons leave the premises and to set up ventilation. **Gas powered ventilation fan will not be used.**
 - If it is determined that an appliance is malfunctioning and thereby producing CO, it will be shut down and ventilation will begin.
 - Once the premise has been reduced to a safe level of CO, the premises may be occupied- at the discretion of the occupant.
 - Attempt to reset the detector.
 - The occupants will be informed of the actions taken and recommendations for correction.
 - Inform occupants that if the detector activates again to call 911.
- 8) Reading of 100 PPM or greater:
- Any reading of 100 PPM or greater inform the occupants that we have detected a potentially lethal level of CO.
 - Order the occupants to leave the premises immediately and to set up ventilation. **Gas powered ventilation fan will not be used.**
 - If it is determined that an appliance is malfunctioning and thereby producing CO, it will be shut down and ventilation will begin.
 - Once the premises have been reduced to a safe level of CO, the premises may be occupied at the discretion of the occupant.
 - An attempt will be made to reset the detector.
 - The occupants will be informed of the actions taken and recommendations for correction.
 - Inform occupants that if detector activates again call 911 if reset has occurred.