

# INKOM FIRE DEPARTMENT

**Subject:** CO & HCN Monitoring

RESPONSE GUIDELINES

**To:** All Personnel

**Revision Date:** December 2, 2020

**From:** Fire Chief

**Review Date:** December 2, 2020

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## **PURPOSE:**

Provide standardized response, assignments, and operational guidance to toxic gas responses.

## **RESPONSIBILITIES:**

Response crews should familiarize themselves with these guidelines, train and practice in this manner for standardization. These minimum needs must be addressed on every incident.

## **BODY:**

The following levels have been adopted by the IFD:

### Carbon Monoxide:

IDLH per NIOSH Pocket Guide (Jan 2003) is 1200ppm

OSHA Exposure limit (Time Weighted Average) 10hr/day 40 hrs/wk is 35ppm

ACGIH Threshold Limit Value (TWA) is 25ppm

EPA 8 hour exposure level 9ppm

**Removal of SCBA is permitted at 35ppm**

**Occupancy is allowed at 9ppm**

### Hydrogen Sulfide:

IDLH per NIOSH Pocket Guide (Jan 2003) is 50ppm

OSHA Exposure limit (Time Weighted Average) 10hr/day 40 hrs/wk is 4.7ppm

ACGIH Threshold Limit Value (TWA) is 4.7ppm

**Removal of SCBA is permitted at 4.7ppm**

**Occupancy is permitted at 4.7ppm**

Hydrogen Sulfide monitoring will be done in conjunction with Carbon Monoxide monitoring and both monitors will have to confirm that we are within the established levels prior to allowing SCBA removal from any personnel within the hazardous area or the area being turned over for occupancy.

**2. Carbon Monoxide alarms:** It is the Company Officer, if an EMT, or an EMT's responsibility to determine if anyone is exhibiting any symptoms of CO poisoning, if so immediately evacuate the premises. Then begin investigating the cause. Dispatch an ambulance if appropriate to evaluate poison victims. If no one exhibits any symptoms of CO poisoning, it is not necessary to evacuate or ventilate unless the CO concentration level exceeds 9ppm.

## INVESTIGATION PROCEDURES

1. Comply with all start up procedures as recommended by the manufacturer of the metering equipment, zero the meter in fresh air if applicable.
2. Initiate a survey of the premises to determine if the CO concentration exceeds 9ppm. If not, inform occupants that our instrument did not detect an elevated level of CO at this time and it is safe for occupancy.
3. If readings indicate above normal levels of CO (above 9ppm), locate source and if natural gas appliances are present notify Intermountain Gas. If it is determined that an appliance is malfunctioning, thereby producing CO, it shall be immediately shut down. Advise occupant to seek servicing from utility company or appliance service repairman.

Common Sources of CO:

Automobile in or near the structure  
Gas appliances  
Fire Places  
Hidden Fires

4. Readings greater than 100ppm Co concentration are considered lethal levels. Occupants shall be immediately evacuated and ventilation shall occur. Appliances or the source shall be shut down. Once the CO concentration has been reduced to a safe level (less than 9ppm) the premises may be occupied at the discretion of the occupant.
5. Recommend the occupants check their CO detector per manufacturer recommendations. Attempt to reset the detector.