

REGIONAL STANDARD OPERATING PROCEDURES

Self-Contained Breathing Apparatus (SCBA)

#: 103.14

REV: 11/2016

Definitions:

CO - Carbon Monoxide

HCN - Hydrogen Cyanide

PPM - Parts Per Million

Procedure:

All personnel expected to respond and function in areas of atmospheric contamination, shall be equipped with self-contained breathing apparatus (SCBA) and trained in its proper use and maintenance.

Members shall achieve a non-leaking facepiece-to-skin seal with the mask. Facial hair shall not be allowed at points where the SCBA facepiece is designed to seal with the face. Individual personnel shall be accountable for compliance with this requirement.

Personnel shall check the condition of their assigned SCBA at the beginning of each shift, after each use, and at any other time it may be necessary to render the equipment in a ready state of condition. Each member shall be accountable for their personal/assigned facepiece.

Company officers shall assign a specific SCBA to each crew member. Each crew member will be responsible for the proper use and function of that SCBA.

If a SCBA is found to be functioning improperly, it shall be taken out of service, reported, and replaced immediately.

The intent of the SCBA procedure is to avoid any respiratory contact with products of combustion, super heated gases, toxic products or other hazardous contaminants.

The use of breathing apparatus means that all personnel shall have facepieces in place, breathing air from the supply provided. Where appropriate, Airline-Supplied Breathing Apparatus may be used in place of SCBA.

Self-Contained Breathing Apparatus shall be used by all personnel operating in:

- A contaminated atmosphere
- An atmosphere which may suddenly become contaminated*
- An atmosphere which is oxygen deficient
- An atmosphere which is suspected of being contaminated or oxygen deficient

This includes all personnel operating:

- In an active fire area.
- Directly above an active fire area.
- In a potential explosion or fire area, including gas leaks and fuel spills.
- Where products of combustion are visible in the atmosphere and where invisible contaminants are suspected to be present.
- Where toxic products are present, suspected to be present, or may be released without warning.
- In any confined space which has not been tested to establish respiratory safety.

*Personnel operating at *structural fire incidents* in an area which is not, but which may become contaminated by products of combustion or other hazardous substances may wear the SCBA with the facepiece removed/at the ready (and only in these circumstances). The wearing of SCBA in these situations provides that it will be immediately available for use if conditions change or if personnel are to enter an area where the use of SCBA is required.

Premature removal of SCBA must be avoided at all times. This is particularly significant during overhaul when smoldering materials may produce increased quantities of carbon monoxide and other toxic products, and/or suspended particulates may be present in the atmosphere.

In structural fire situations, our evaluation of atmospheric conditions is limited to that of toxic gases (in particular CO and HCN). We cannot, however perform reliable evaluation of the particulates in the atmosphere, which are known carcinogens. For this reason, SCBA (with facepiece) shall be worn by structural personnel in the fire area and adjacent interior areas throughout the duration of the incident.

During the investigation phase of the incident (post-overhaul), investigative personnel and those assisting investigative personnel may utilize a cartridge-type particulate respirator, providing that continuous atmospheric monitoring has been performed and both CO and HCN levels have been found to be zero (0) PPM.

Regardless of incident type, whenever there is any doubt about respiratory safety, SCBA use shall be maintained until the atmosphere is established to be safe by testing/monitoring.

All personnel shall be able to demonstrate a high level of proficiency and compatibility with the SCBA under conditions which simulate those expected as a job requirement, to include demonstrating an effective facepiece to skin seal of the SCBA.

SCBA facepiece fit-testing shall be conducted:

- Annually (for all personnel subject to SCBA usage, including BCs/ACs)
- Upon first-time issuing of SCBA (i.e. newly hired personnel or new SCBA model purchase)