

Tully Hose Co. #1

Standard Operating Guidelines
Respiratory protection
Guideline # TF-402 – Rev.1

Purpose: To establish guidelines that are compliant with NFPA 1500 and that these guidelines address the safe use of respiratory protection equipment. These guidelines are not intended to replace, but to work in conjunction with the Tully Hose Co. #1 Respiratory Protection Plan.

Guideline: The Tully Hose Co. #1 provides respiratory protection for trained firefighters in the form of the Scott Aviation Air-Pak 4.5 self-contained breathing apparatus (SCBA). This SCBA is approved and maintained under NIOSH approved number TC-13F-76 and NFPA 1981 Standard on open-circuit, self contained breathing apparatus for the fire service, 1997 edition, for use in atmospheres that may be immediately dangerous to life and health.

When engaged in any operation where personnel could encounter atmospheres that are immediately dangerous to life and health (IDLH) or a potentially IDLH or where the atmosphere is unknown, the Fire District shall require all members to use SCBA.

Firefighters shall be certified at least annually in the safe and proper use of respiratory protection equipment that they are authorized to use

Firefighters wearing SCBA shall be fully protected with all components of district issued or approved turnout gear including boots, pants, coat, gloves, Nomex hood and helmet unless the incident commander deems otherwise.

An adequate reserve air supply shall be provided by reserve cylinders or by an on-scene refill capability, or both.

Respiratory protection equipment shall be stored in a ready for use condition and shall be protected from damage or exposure to rough handling, excessive heat or cold, moisture, and, or other elements.

Personnel using SCBA shall not compromise the protective integrity of the SCBA for any reason when operating in IDLH, potentially IDLH, or unknown atmospheres by removing the face piece or disconnecting any portion of the SCBA that would allow the ambient atmosphere to be breathed.

Breathing air used to fill SCBA cylinders shall comply with the requirements of ANSI/CGA G7.1, Commodity specification for air, with minimum air quality of Grade D, a moisture content of no more the 24 parts million, and a maximum particulate level of 5 mg/m (3) air.

When the Fire District purchases compressed breathing air in a vendor supplied SCBA cylinder, the Fire District shall require the vendor to provide documentation that a sample of the breathing air obtained directly at the point of transfer from the filling system to the SCBA cylinder has been tested at least quarterly and that it complies with ANSI/CGA G7.1

When the Fire District obtains compressed breathing air from a supplier and transfers it to other storage cylinders, cascade system cylinders, storage receivers, and other such storage equipment used for filling SCBA, the supplier shall be required to provide documentation that a sample of the breathing air obtained directly at the point of transfer from the filling system to the storage cylinders, cascade system cylinders, storage receivers, and other such storage equipment has been tested at least quarterly and that it complies with ANSI/CGA G7.1.

When the Fire District compresses its own breathing air, the district shall be required to provide documentation that a sample of the breathing air obtained directly from the point of transfer from the filling system to the SCBA cylinder has been tested at least quarterly and that it complies with ANSI/CGA G7.1.

The fit of the respiratory protection equipment of each new member shall be tested before the members are permitted to use respiratory protection equipment in a hazardous atmosphere. Only members with a properly fitting face piece shall be permitted by the Fire District to function in a hazardous atmosphere with respiratory protection equipment.

The face piece seal capability of each member qualified to use respiratory protection equipment shall be verified by qualitative or quantitative fit testing on an annual basis and whenever new types of respiratory protection equipment of face pieces are issued.

Records of face piece fitting tests shall include at least the following information:

Name of member being tested.

Type of fitting test performed.

Specific make and model of face pieces tested

Pass/fail results.

Nothing shall be allowed to enter or pass through the area where the respiratory protection face piece is designed to seal with the face, regardless of the specific fitting test measurement that can be obtained.

Members who have a beard or facial hair at any point where the face piece is designed to seal with the face or whose hair could interfere with the operation of the unit shall not be permitted to use respiratory protection in hazardous or potentially hazardous atmospheres. These restrictions shall apply regardless of the specific fitting test measurement that can be obtained under test conditions.

When a member must wear spectacles when wearing respiratory protection, the face piece shall be fitted with spectacles in such a manner that they shall not interfere with the face piece to face seal. Spectacles with any strap or temple bars that pass through the face piece to face seal shall be prohibited.

Use of contact lenses shall be permitted during full face piece respiratory protection use, provided that the member has previously demonstrated successful long-term contact lens use.

Any head covering that passes between the sealing surface of the respiratory protection face piece and the member's face shall be prohibited. The respiratory protection face piece and head harness straps shall be worn under the protective hoods. The respiratory protection face piece

shall be worn under the head protection of any hazardous chemical protective clothing. Helmets shall not interfere with the respiratory protection face piece to face seal.

SCBA cylinders shall be hydrostatically tested as required by the manufacturers and applicable governmental agencies.

In service SCBA cylinders shall be stored fully charged, inspected weekly, monthly, and prior to filling according to NIOSH requirements, CGA standards, and manufacturers' recommendations.

During filling of SCBA cylinders, all personnel and operators shall be protected from catastrophic failure of the cylinder.

Rapid refilling of SCBA while being worn by the user shall only be used under the following conditions:

NIOSH approved fill options are used.

The risk assessment process has identified procedures for limiting personnel exposure during the refill process, and provides for adequate inspection, and member safety.

An imminent life-threatening situation requiring immediate loss of life or serious injury.

PASS devices shall meet the requirements of NFPA 1982, standard on personal alert safety systems. Each member shall be provided with, use and activate his or her PASS devices in all emergency situations that could jeopardize that person's safety due to atmospheres that could be IDLH, incidents that could result in entrapment, structural collapse of any type, or as directed by the incident commander or incident safety officer.

Pass devices shall be tested at least weekly and prior to each use, and shall be maintained in accordance with the manufacturers instructions.