

ANNEX F: Respiratory Protection Policy

Pemberton Township Fire Department Respiratory Protection Policy

Section 1: Introduction

1.1 Policy

It is the policy of the Pemberton Township Fire Department to maintain comprehensive safety and occupational health programs predicted upon sound engineering, education, and enforcement. In accordance with the requirements of NFPA Standard 1500, practices for proper respiratory protection must be implemented for all Pemberton Township Fire Department members.

1.2 Purpose

This program establishes departmental policy, responsibilities, and the requirements for the protection of volunteers whose job requires the use of respiratory protection.

1.3 Contents

This program shall contain, as a minimum, the following components:

- a. written standard operating guidelines
- b. medical surveillance
- c. training
- d. fitting of respirator
- e. respirator use
- f. inspection, storage, and maintenance
- g. breathing air program
- h. record keeping
- g. evaluation

1.4 Type of Respiratory Protection

Although various forms of respiratory protection exist, the Pemberton Township Fire Department shall recognize only self-contained breathing apparatus (SCBA) for use by its members.

This determination is based upon the following factors:

- a. Fire Department members work in oxygen deficient atmospheres
- b. Fire Department members work in unknown atmospheres
- c. Fire Department members work in immediately dangerous to life and health (IDLH) atmospheres
- d. Fire Department members work in confined spaces

Section 2: Standard Operating Guidelines

2.1 It is the policy of the Pemberton Township Fire Department that all personnel functioning in areas of atmospheric contamination shall be equipped with self-contained breathing apparatus.

2.2 The Battalion Chief or his/hers designee shall be responsible for the inspection of all SCBA assigned to their stations and shall include a weekly and after all incidents involving the use of the SCBA using the PTVFC inspections form. These forms shall be forwarded to the Department SCBA Officer for review at the end of each month.

2.3 If an air pak is found to be malfunctioning, it shall be taken out of service, tagged, and reported to the SCBA Officer as soon as possible.

2.4 All personnel shall utilize SCBA when entering the following situations:

- a. Contaminated atmospheres
- b. Situations where it is likely the atmosphere may be questionable
- c. Any smoke filled atmosphere
- d. Below ground level areas
- e. As directed by the OIC

2.5 Personnel will resist the tendency to prematurely remove SCBA during fire situations.

2.6 Personnel will remove SCBA only when the atmosphere has been declared safe by the Incident Commander.

2.7 No member shall wear a SCBA who has hair, facial or otherwise, that interferes with its proper operation.

2.8 No member shall wear a SCBA who has not been trained and certified in its operation.

2.9 All members shall adhere to the two in two out mandate. See PEOSHA 1910.134 and section 6.4.4 & 6.4.5 of the Departments Standard Operating Procedures.

Section 3 Medical Surveillance

3.1 In accordance with NFPA Standard 1500, medical certification for the use of respiratory protection shall be conducted annually. This will be accomplished through the annual medical physical examination, conducted by the Occupational Health Clinic. Members may elect to use their own personal physician at their own expense.

Section 4 Training

4.1 Training Required

Proper use of respiratory protection equipment can only be assured by proper training of all members of the Department. Therefore, the training as specified in this document is required before using a SCBA device. Initial training is to be provided during the Firefighter I course at an approved training academy or a course approved by the Department Chief. No member is to wear SCBA unless this training has been completed.

4.2 Training Program

Training in the use of SCBA shall be done in two phases. Each member will be given initial training before using SCBA, and refresher training annually thereafter. Refresher training shall consist of the items in the attached outline.

In addition, each member shall be given the following:

- a. A written test on SCBA operation
- b. A performance test on SCBA donning, operation, and restoration

Any member failing any portion of the refresher-training program will no longer be certified to use SCBA.

Section 5 Respirator Fitting and Sealing

5.1 Responsibility for Seal Inspection

Each member of the Pemberton Township Fire Department shall inspect and test respiratory protection equipment before each use to insure there is a proper seal between the face piece and the face.

5.2 Seal Inspection Training

Members of the Department shall be given training in how to determine if a proper fit exists both as part of initial training and refresher training.

5.3 Inspection Before Use

Each member must determine face piece fit by taking a qualitative or quantitative fit test during initial and refresher training. Each member shall be responsible for selecting and wearing the correct size face piece. A member shall not wear respiratory protection equipment unless the proper size face piece is available and the equipment is in working condition according to the manufacturer's specifications.

5.4 Effective Seal Required

An effective face-to-face piece seal is extremely important when using respiratory protection equipment. Even minor leakage can allow contaminants to enter the face piece, even with positive pressure SCBA. Any outward leakage will increase the rate of air consumption, reducing the time available for use and safe exit. The face piece must seal tightly against the skin, without penetration or interference by any protective clothing or equipment.

5.4.1 Seal Interference

The use of protective hoods shall not interfere with the face-to-face piece seal. Protective hoods shall only be worn in accordance with the manufacturer's recommendations.

5.5 Facial Hair Prohibited

- **Side burns**- will not exceed past the earlobe or one inch in length whichever is shorter or come in contact with the SCBA mask.
- **Mustache**- will not exceed $\frac{3}{4}$ inch below the corner of the mouth or come in contact with the sealing surface of the SCBA mask, whichever is shorter.
- **Beards**- prohibited
- **Goatee**- prohibited

Section 5 Respirator Fitting and Sealing continued

5.6 Contact Lenses

Contact lenses shall not be worn with respiratory protection equipment except as permitted by NFPA 1500, and ANSI Z88.5-1981 Practice for Respiratory Protection for the Fire Service.

5.7 Face Piece Fit Test

Each member shall be given face piece fit testing during initial and refresher training. Testing will be accomplished according to ANSI Z88.5 1981 Practices for Respiratory Protection for the Fire Service, and NFPA 1404 Fire Department Self Contained Breathing Apparatus Program.

Only members certified to conduct the face piece fit test will conduct the test.

Section 6 Respirator Use

6.1 Operation of Respirator

Members will follow the procedures as recommended in the Manufacturer's Operation and Maintenance Instructions. (Attached)

Section 7 Inspection, Storage, and Maintenance

7.1.1 Inspection

Members will follow the procedures as recommended in the Manufacturer's Operation and Maintenance Instructions. (Attached)

7.1.2 Inspection Record Keeping

SCBA Team Members will complete the Fire Department Weekly SCBA Report (Attached) after each inspection. The report will be turned into the Battalion Chief or his/her designee, who will then, after his/her review, turn into the Department SCBA Officer.

7.2 Storage

All units shall be stored so that they are protected against direct sunlight, dust accumulation, severe temperature changes, excessive moisture, fumes, and damaging chemicals. Care is to be taken so that the means of storage does not distort or damage rubber or elastomeric components.

7.3 Maintenance

7.3.1 Maintenance Instructions

Members will follow the procedures as recommended in the Manufacturer's Operation and Maintenance Instructions. (Attached)

7.3.2 Repair or Replacement of Components

Repair or replacement of SCBA components shall only be performed by persons certified in their repair.

7.3.3. Cleaning Instructions

Members will follow the procedures as recommended in the Manufacturer's Operation and Maintenance Instructions. (Attached)

7.3.4 Flow Testing

Regulator flow testing shall be accomplished every two years by personnel certified to conduct such testing. Records of flow tests will be maintained by the SCBA Officer. Any regulator not meeting flow requirements will be placed out of service until repaired.

7.3.5 Cylinder Testing and Maintenance

SCBA cylinders will be hydrostatically tested according to periods specified by the manufacturer. (Steel Cylinders: Every 5 Years, Composite Cylinders: Every 3 Years) Members will follow procedures as recommended in the Manufacturer's Operation and Maintenance Instructions. (Attached). Hydrostatic test dates will be recorded And maintained by the SCBA Officer

7.3.6 Air Exchange

All SCBA cylinders shall be emptied and refilled every 90 days, according to a schedule established by the Chief's Office. This will be recorded and maintained by the SCBA Officer.

Section 8 Breathing Air Program

8.1 Air Quality Control

8.1.1 Air for SCBA taken from the regular production of a compressor and storage system shall meet the testing and quality requirements of the Compressed Gas Association G7.1 Commodity Specification for Air, with a minimum quality of Grade D, and a maximum dew point of -65 degrees Fahrenheit.

8.1.2 Air quality shall be tested at least every three months by a qualified laboratory. Test samples shall be taken from the regular production of the compressor and storage system. The Pemberton Township Fire Department will be notified immediately if air samples do not meet the criteria listed in Section 8.1.1.

8.1.3 Records shall be maintained for each air quality test. If required air quality is not achieved, use of the system shall be discontinued until repairs are made and verified by testing.

8.1.4 Any air cylinders that were filled with air that is suspected of not meeting air quality standards shall be emptied and purged.

8.2 Recharging Air Cylinders

8.2.1 The air cylinders of all SCBA shall be maintained at not less than 90 percent of the rated pressure of the cylinder. Cylinders having less than 90 percent of their rated pressure shall be segregated from full cylinders until filled.

8.2.2 SCBA cylinders shall be refilled only with air that meets the requirements of Section 8.1.1.

8.2.3 Air cylinders shall be filled only by personnel who have been trained on the proper procedures and equipment.

8.2.4 Refill procedures will be posted in the Compressor Room of Sta. 181. Personnel will follow the manufacturer's instructions when refilling SCBA cylinders.

8.2.5 Personnel assigned to fill SCBA cylinders will visually inspect the cylinder before filling. Any cylinders damaged or with out of date hydrostatic tests will not be filled.

Section 9 Record Keeping

9.1 The following records shall be maintained by the Chief's Office:

- a. Annual SCBA Use Recertification Test
- b. Fit Testing Results
- c. Annual Review of Respiratory Protection Program
- d. Air Quality Test Results

9.2 The following records shall be maintained by the SCBA Officer:

- a. Regulator Flow Testing Results
- b. Any Repairs to SCBA Components
- c. Any Repairs to Compressor or Cascade System
- d. Daily SCBA Inspection Sheet

Section 10 Program Evaluation

10.1 Annual Review

An annual review of the respiratory protection program shall be conducted by the Chief, or his designee, to include the following:

- a. Determination of upgrading or changes to program
- b. Determination to ensure policies and procedures are being followed
- c. Problem areas are being addressed in a timely manner
- d. Failures encountered with personnel, training, and equipment are analyzed and corrected