

# Eastampton Fire-Rescue Department Respiratory Protection Program



**Adopted February, 2003  
By the Board of Fire Commissioners  
Eastampton Fire District**

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## Section 1 - Introduction

### ***Policy***

It is the policy of the Eastampton Fire-Rescue Department (the ***Department***) to maintain comprehensive occupational safety and health programs based upon sound engineering, education, and enforcement. This document establishes Department policy, responsibilities, and requirements for the protection of firefighters whose job requires the use of respiratory protection.

This document will also provide assistance to the firefighter in the use and care of respiratory protection.

The Board of Fire Commissioners of the Eastampton Fire District (the ***Board***) appoints the Eastampton Fire-Rescue Department Safety Officer. The Safety Officer is solely responsible for all facets of this program and has full authority to make necessary decisions to ensure success of this program. The Safety Officer will develop written detailed instructions covering each of the basic elements in this program, and is the sole person authorized to amend these instructions.

## Section 2 - Standard Operating Procedures

### ***General***

Firefighters shall wear a self-contained breathing apparatus (SCBA) under the following conditions:

- While engaged in interior structural firefighting;
- While working in confined spaces where toxic products or an oxygen deficient atmosphere may be present;
- During emergency situations involving toxic substances; and
- During all phases of firefighting and overhaul.

Firefighters wearing an SCBA must activate the personal alert safety system (PASS) device before entering an area where respiratory protection is required.

Firefighters wearing SCBA shall conduct a seal check prior to each use.

Firefighters shall not remove the SCBA at any time in the dangerous atmosphere. SCBA shall be used in accordance with the manufacturer's instructions (see Appendix A).

All firefighters shall continue to wear an SCBA until the officer in charge determines that respiratory protection is no longer required.

### ***Protective Clothing***

Firefighters wearing an SCBA shall be fully protected with the use of approved structural firefighting clothing that meet the requirements of the PEOSH Standards for Firefighters (N.J.A.C.12:100-10). Protective clothing shall include turnout coat, bunker pants, gloves, boots, helmet, fire resistant hood, and PASS device.

## ***Procedures for Interior Structural Firefighting***

In interior structural fires, the Department shall ensure that:

- At least two firefighters enter the immediately dangerous to life and health (IDLH) atmosphere and remain in visual or voice contact with one another at all times;
- At least two firefighters will be located outside the IDLH atmosphere; and
- All firefighters engaged in interior structural firefighting will use SCBAs.

**Note:** One of the two firefighters located outside the IDLH atmosphere may be assigned to an additional role, such as incident commander in charge of the emergency or safety officer, so long as the firefighter is able to perform assistance or rescue activities without jeopardizing the safety or health of any firefighter working at the incident.

Nothing in this section is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.

There must always be at least two firefighters stationed outside during interior structural firefighting. They must be trained, equipped, and prepared to enter if necessary to rescue firefighters inside. However, the incident commander has the responsibility and flexibility to determine when more than two outside firefighters are necessary given the circumstances of the fire. The two-in/two-out rule does not require an arithmetic progression for every firefighter inside, i.e. the rule should not be interpreted as four-in/four-out, eight-in/eight-out, etc.

Firefighters will wait to commence interior structural firefighting, until the proper number of firefighters can be assembled on scene as required by the response. During this time, the fire will be attacked only from the outside, sizing-up operations will occur and emergency rescue necessary to save lives may take place.

One of the standby firefighters may have other duties such as serving as the incident commander, safety officer, or operator of fire apparatus. However, one of the outside firefighters must actively monitor the status of the inside firefighters and will not be assigned additional duties. The second outside firefighter may be involved in a wide variety of activities. Both of the outside firefighters must be able to provide support and assistance to the two interior firefighters; any assignment of additional duties for one of the outside firefighters must be weighed against the potential for interference with this requirement. Proper assignment of firefighting activities at an interior structural fire must be determined by the incident commander and is dependent on the existing firefighting situation. Consideration of all worksite variables and conditions, and the judgment of the incident commander is critical.

The two firefighters entering an IDLH atmosphere to perform interior structural firefighting must maintain visual or voice communication at all times. Electronic methods of communication such as the use of radios shall not be substituted for direct visual contact between team members in the danger area. However, reliable electronic communication devices are not prohibited and certainly have value in augmenting communication and may be used to communicate between inside team members and outside standby firefighters.

## **Section 3 - Training**

### ***Self-Contained Breathing Apparatus Training***

Firefighters wearing respiratory protection shall be trained in proper use, cleaning and maintenance. No firefighter shall wear respiratory protection without training as specified in this document.

Training in the use of respiratory protection shall be done in two phases. Each new firefighter will be given initial training before using respiratory protection and annual training thereafter.

### **New Recruit Training**

No firefighter is to use respiratory protection unless training has been successfully completed. Initial training for SCBA use in interior firefighting shall be provided during the Fire Fighter I Course at a State approved training academy. Firefighters trained at other than a state approved fire academy must be certified as trained by the Station Training Officer, Station Deputy Chief and Department Safety Officer before wearing an SCBA. Such training and certification shall be documented on the approved Department SCBA training form in Appendix C of this program.

### **Annual Training**

On-going training shall be provided to all firefighters of the Department.

Each firefighter must pass a face piece fit-test during initial and annual training. Appendix B of this program contains the fit-test protocol and example fit-test record.

### **Course Content**

Initial and annual respiratory protection training shall be conducted as specified in Appendix C.

### ***Fill Station Training***

SCBA cylinders will be filled only by firefighters who have completed fill station training. Retraining will be provided annually.

### **Course Content**

Initial and annual fill station training shall be conducted as specified in Appendix D.

## **Section 4 - Respirator Fitting And Seal Check**

Each firefighter must pass a face piece fit-test during initial and annual training. Appendix B of this program contains an example of a fit-test record.

### ***Inspection Before Use***

When using SCBA, each firefighter shall select and wear the correct size face piece as determined by initial and annual fit testing. A firefighter shall not wear respiratory protection unless the proper size face piece is available and the equipment is in proper working condition according to the manufacturer's specifications.

### ***Effective Seal Required***

An effective face-to-face piece seal is extremely important when using respiratory protective equipment. Minor leakage can allow contaminants to enter the face piece, even with a 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 other equipment.

Nothing can be between the sealing surface of the mask and the face of the wearer, including but not limited to, eyeglasses, protective hoods, and beards or other facial hair.

Firefighters shall perform a seal check prior to every SCBA use. SCBA can only be worn when an adequate seal is achieved. (NOTE: the required seal check procedures are found in Appendix B-1 of the PEOSH Respiratory Protection Standard. The PEOSH Respiratory Protection Standard is found in Appendix G of this document).

## **Section 5 - Inspection, Storage, Maintenance And Air Supply**

### ***Inspection***

Regular periodic inspections are required to ensure that all respiratory protection equipment is properly operating and available for use.

### ***Inspection Schedule***

All SCBA and spare cylinders shall be inspected after each use and at least monthly. Guidelines for inspection are in the manufacturer's instructions found in Appendix A of this program.

After each inspection, the appropriate forms (see Appendix E) shall be completed. SCBA units determined to be unfit for use shall be taken out of service, and tagged with a description of the particular defect.

In the event replacement or repair of SCBA components is necessary, the unit can be returned to the manufacturer's service facility. Otherwise, work shall be performed according to manufacturer's instructions and only by persons trained and certified by the manufacturer.

Firefighters will not subject SCBA units to unnecessary abuse due to neglect and/or carelessness. Caution must especially be exercised to protect the face piece section of the mask from being scratched or damaged.

Each SCBA shall be cleaned and disinfected after each use. Only cleaning/sanitizing solutions for respiratory equipment will be used for cleaning and disinfection. (NOTE: the required SCBA cleaning procedures are found in Appendix B-2 of the PEOSH Respiratory Protection Standard. The PEOSH Respiratory Protection Standard is found in Appendix G of this document).

SCBA cylinders shall be hydrostatically tested within the period specified by the manufacturer and applicable governmental agencies.

## **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.

## **Air Supply**

Breathing air in the SCBA cylinder shall meet the requirements of the Compressed Gas Association G-7.1-1989, *COMMODITY SPECIFICATION FOR AIR*, with a minimum air quality of Grade D. The Department shall ensure that sources supplying compressed breathing air provide a copy of the most recent inspection and certification.

The Department shall assure that sufficient quantities of compressed air are available to refill SCBA for all emergencies. This shall be accomplished through mutual aid with the Burlington County Mutual Aid Plan and Central communications.

Only personnel who have completed fill station training shall fill SCBA air cylinders. Compressed oxygen shall not be used in open-circuit SCBA.

## **Section 6 - Medical Evaluation**

A medical evaluation to determine the firefighter's ability to wear a SCBA will be provided. Only firefighters that are medically able to wear SCBA will be allowed to do so. Appendix F contains the medical evaluation protocol.

## **Section 7 - Record Keeping**

The respective Station Deputy Chiefs or their designees shall maintain the following records:

- Completed SCBA inspection forms
- Records/results of air quality tests
- Completed fit test records (Each firefighter will receive a copy of his/her fit test record)
- Records for both recruit training as well as on-going SCBA training records
- Certificates of completion for Fire Fighter I courses
- Fill station training records

Medical Evaluation Results Forms will be maintained by the Clerk of the Board or such other person as may be designated by the Board.

### ***Summary Of Respiratory Protection Program Records***

<b>Type of Record</b>	<b>Keep Records For</b>
SCBA Inspection Records After Use Monthly	until replaced one month
SCBA Maintenance/Repair Records	life of equipment
Air Quality Tests	1 Year
Fit Test	1 Year
Medical Evaluation	Length of employment, plus thirty years
Training	5 Years
Records Documenting Training for Those Who Fill Cylinders	1 Year

## **Section 8 - Program Evaluation**

### ***Evaluation Requirements***

The effectiveness of the SCBA program shall be evaluated and corrective actions taken to ensure the respiratory protection program is properly implemented. The Department will regularly consult with firefighters to assess their views on the effectiveness of the program and to identify any problems.

The evaluation will be conducted by the Safety Officer. The evaluation will ensure:

- Procedures for purchasing of approved equipment are in place;
- All firefighters are being properly fitted with respiratory protection;
- All firefighters are properly trained;
- The proper equipment, cleaning, inspection, and maintenance procedures are implemented;
- The required records are being kept; and
- Changes are implemented to correct deficiencies.

### ***Program Monitoring***

Periodic monitoring of the respiratory protection program is necessary to ensure that all firefighters are adequately protected. Random inspections shall be made by the Safety Officer to ensure that the provisions of the program are being properly implemented.

## **Appendix A - Manufacturer's Instructions**

Each Station Deputy Chief will maintain a copy of all manufacturers' instructions for the use of SCBA and fill stations operated by the Department.

Any person may examine a copy of the instructions by making a request to the appropriate Station Deputy Chief.

## Appendix B - Respirator Fit Test Record

Date: (of fit test) \_\_\_\_\_

Firefighter: \_\_\_\_\_

SCBA Manufacturer: \_\_\_\_\_

Model: \_\_\_\_\_

NIOSH Approval Number: \_\_\_\_\_

Facepiece Size

Small \_\_\_\_\_ Medium \_\_\_\_\_ Large \_\_\_\_\_

Conditions which could affect respirator fit:

- Clean Shaven       Facial Scar       Dentures Absent
- 1 -2 Day Beard Growth       2+ Day Growth
- Moustache       Glasses

Comments: \_\_\_\_\_

Fit Test Protocol Used \_\_\_\_\_

- Pass       Fail

Comments: \_\_\_\_\_

\_\_\_\_\_

Employee Acknowledgment of Test Results:

Employee Name (Print): \_\_\_\_\_

Employee Signature \_\_\_\_\_ Date: \_\_\_\_\_

Test Conducted By (Print): \_\_\_\_\_

(Signature): \_\_\_\_\_

**NOTE:** Appendix G of this document contains the PEOSH Respiratory Protection Standard. Appendix A of the PEOSH Respiratory Protection Standard contains all of the mandatory fit test protocols. One of those protocols must be used.

## Appendix C - SCBA Training Outline and Certification

At a minimum, the following topics are to be covered in the SCBA training.

1. Why the SCBA is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
2. What the limitations and capabilities of the SCBA are.
3. How to use the SCBA effectively in emergency situations, including situations where the SCBA malfunctions.
4. Instruction on recognizing medical signs and symptoms that may limit or prevent the effective use of the SCBA.
5. How to inspect, put on and remove, use, and check the seals of the SCBA.
6. What the procedures are for maintenance, and storage of the SCBA.
7. The general requirements of the PEOSH Respiratory Protection Standard.

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### Training Certification

This certification represents:

Initial SCBA Certification

Refresher Training Certification

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Method of certification:

Firefighter has successfully completed the course of instruction for Firefighter I, and a certificate issued by the State of New Jersey is on file. Firefighter is qualified to wear SCBA and to participate in interior firefighting operations.

Or

Firefighter has received Firefighter I certification through the grandfather clause, and a certificate issued by the State of New Jersey is on file, and the firefighter has successfully completed the Department's SCBA training program. Firefighter is qualified to wear SCBA and to participate in interior firefighting operations.

Or

Firefighter has successfully completed the Department's SCBA training program. Firefighter is qualified to wear SCBA but may NOT participate in interior firefighting operations.

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Certified by:

Station Training Officer: \_\_\_\_\_

Date: \_\_\_\_\_

Station Deputy Chief: \_\_\_\_\_

Date: \_\_\_\_\_

Department Safety Officer: \_\_\_\_\_

Date: \_\_\_\_\_

## Appendix D - Fill Station Training Outline and Certification

At a minimum the following topics are to be covered in the fill station training:

1. Procedures for inspecting the SCBA cylinder for damage.
2. Information to ensure that the cylinder has the proper hydrostatic test date.
3. Information to ensure that composite cylinders older than the manufacturer and government service life are not refilled and are removed from service.
4. Procedures for safely operating the fill station.
5. Information on the importance of using at least grade D air.
6. Information on the consequences of cylinder failure.
7. The manufacturer's instructions for the fill station.
8. Record keeping requirements.

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### Training Certification

- Firefighter has successfully completed the Department's fill station training program.  
Firefighter is qualified to operate fill station to fill SCBA cylinders.

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Certified by:

Station Training Officer: \_\_\_\_\_ Date: \_\_\_\_\_

Station Deputy Chief: \_\_\_\_\_ Date: \_\_\_\_\_

Department Safety Officer: \_\_\_\_\_ Date: \_\_\_\_\_

## Appendix E – SCBA Inspection Checklist

Type of Check:       Monthly/Regular       After Use

Checked by: \_\_\_\_\_ Date: \_\_\_\_\_

For Monthly/Regular checks, list assigned mask, if any. For After Use checks, list mask worn by user.

<b>Regulator Number</b>									
<b>Bottle Number</b>									
<b>Mask Number</b>									
<b>Regulator Check</b>									
<b>Condition of straps, buckles, back plate</b>									
<b>O-ring in place</b>									
<b>High-pressure hose</b>									
<b>Low-pressure hose</b>									
<b>Operational Check</b>									
<b>Bottle Condition</b>									
<b>Cylinder Pressure PSI</b>									
<b>Bottle Hydrostat Date</b>									
<b>Harness Gage Pressure</b>									
<b>Pressure Function</b>									
<b>Bypass Function</b>									
<b>Pack Alarm</b>									
<b>Integrated PASS Alarm</b>									
<b>Regulator</b>									
<b>Inhalation Valve</b>									
<b>Mask Condition</b>									
<b>Mask Cleanliness</b>									

*Add additional comments to the back of this form.*

### Monthly Spare Bottle Check

Cylinder Number: \_\_\_\_\_ Hydrostatic Expiration Date: \_\_\_\_\_

Use one column for each inspection.

<b>Inspection Date</b>									
<b>O-ring in place</b>									
<b>Bottle Condition</b>									
<b>Cylinder Pressure PSI</b>									

*Add additional comments to the back of this form.*

### Monthly SCBA Mask Check

Mask Number: \_\_\_\_\_ Assigned to: \_\_\_\_\_

Use one column for each inspection.

<b>Inspection Date</b>									
<b>Mask Checked by (initials)</b>									
<b>Mask Straps</b>									
<b>Mask Seal</b>									
<b>Mask Cleanliness</b>									

*Add additional comments to the back of this form.*

## Appendix F - Medical Evaluation Protocol

Medical evaluation will be provided to firefighters before they are fit tested for respirator use. The Board shall contract with a qualified healthcare provider to provide medical evaluations. Medical evaluation procedures are as follows:

The medical evaluation will be conducted using the required PEOSH questionnaire. The questionnaire is provided in Appendix C of the PEOSH Respiratory Protection Standard (the respiratory protection standard is found in Appendix G of this document). The Program Administrator will provide a copy of this questionnaire to all firefighters requiring medical evaluations. All affected firefighters will be given a copy of the questionnaire to fill out, along with a stamped and addressed envelope for mailing the questionnaire to the Board's designated healthcare provider.

Firefighters will receive follow-up medical evaluations as required by the PEOSH Respiratory Protection Standard, and/or as deemed necessary by the Board's designated healthcare provider.

Upon request, the firefighter will have the opportunity to speak with the health care professional about their medical evaluation.

The Program Administrator has provided the Board's designated healthcare provider with a copy of this program, a copy of the PEOSH Respiratory Protection Standard, information on the type of SCBA used by the Department, information on the frequency and length of SCBA use, potential temperature and humidity extremes, and information on turnout gear used for firefighting.

Additional medical evaluations will be provided to firefighters under the following circumstances:

- The firefighter reports signs and/or symptoms related to their ability to wear to use an SCBA, such as shortness of breath, dizziness, chest pains, or wheezing;
- The Board's designated healthcare provider informs the Program Administrator that the firefighter needs to be reevaluated;
- Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation.

All examinations and questionnaires are to remain confidential between the firefighter and the health care provider. The Department will not keep medical records and completed questionnaires. The medical records and questionnaires will be under the control of the Board's designated healthcare provider.

The Board's designated healthcare provider will provide the Program Administrator and firefighter with a written recommendation regarding the firefighter's ability to wear a respirator.

Only the following information will be provided:

- A statement on the firefighter's ability to wear a respirator,
- The need for follow-up medical evaluation if any are necessary, and
- A statement that the medical provider has provided the firefighter with a copy of the recommendation.

Medical records will be maintained in compliance with the PEOSH Access to Employee Exposure and Medical Records (29CFR1910.1020).

The Department will provide employees access to their medical records. Access means the right and opportunity to examine and copy records.

## **Appendix G - PEOSH Respiratory Protection Standard 29CFR1910.134**

(By Reference)