

SOUTH PORTLAND FIRE DEPARTMENT

STANDARD OPERATING GUIDELINES

Policy #:	5.222	Effective Date:	11/1/2023
Title:	Respiratory Protection Standard	# of pages:	8
Category:	Personnel	Classification:	Yellow

1. **PURPOSE:** The South Portland Fire Department is well aware that in the performance of our duties we may be exposed to respiratory hazards our operations. These hazards include but are not limited to smoke, heat, toxic gases (known and unknown), O2 deficiency and biological hazards. In some cases, these hazards present work environments that are Immediately Dangerous to Life and Health (IDLH).
2. **POLICY:**
This program applies to all employees who are required to wear respiratory protection during firefighting or other emergency activities.

A. Responsibilities:

Fire Chief

The Fire Chief shall have the overall administrative responsibility of the “South Portland Fire Department Respiratory Protection Standard” including;

- Development of the “Respiratory Protection Standard”.
- Development of policies, rules and regulations.
- Appointment of “Respiratory Standard” program administrator.

Program Administrator

The Program Administrator is responsible for the following duties;

- Identifying work areas, and evaluating hazards, processes, or tasks that require workers to wear SCBA or respirators.
- Monitoring respirator use to ensure proper usage of the type of unit per manufacturer’s operational instructions.
- Arranging for and/or conducting training.
- Conducting quantitative and qualitative fit testing.
- Administering the Medical surveillance program
- Maintaining records required by the program.
- Updating the written program, annually and as necessary.
- Ensuring an adequate supply of cleaning and disinfecting material is on hand to maintain all respiratory masks (SCBA) on a day to day and post emergency use basis.

- Maintain a TYPE I GRADE D quality of compressed air consistent with 29 CFR 1910.134.

Provide to the current “Health Care Provider”* the necessary information about the standard including a copy of the South Portland Fire Department program. A copy of the Respiratory Protection Standard (29 CFR 1910.134). A list of hazards encountered in the work environments, and for each employee requiring evaluation; his/her work area or job title, proposed SCBA type and weight, length of time required to wear SCBA expected physical work effort, potential temperature extremes, and information regarding type and weight of protective clothing.

The Deputy Chief of Training Deputy has been designated The Respiratory Protection Program Administrator for the South Portland Fire Department and is assisted by the EMS Coordinator.

Supervisors

Supervisors are responsible for ensuring that the respiratory protection program is implemented. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the employees under their charge.

Duties include the following;

- Ensuring that employees under their supervision have received appropriate training, fit testing, and medical evaluations prior to the donning of any SCBA at any IDLH incident requiring the use of same, including live fire training.
- Ensuring the availability of respiratory protection equipment.
- Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring that respiratory protection equipment is properly cleaned, maintained, and stored according to the respiratory protection standard.
- Ensuring that respiratory protection equipment fits properly and do not cause discomfort.
- Continually monitor work areas and operations to identify respiratory hazards.
- Report to the Program Administrator or Fire Chief should an employee under their supervision have difficulty when using a respiratory protection.
- Coordinate with the Program Administrator how to address respiratory hazards or other concerns of this program.

Employees

Each employee has the responsibility to

- Wear their respiratory protection equipment when and where required and in the proper manner that which they were trained.

- Also to care for, maintain, and store their respiratory protection equipment.
- Inform their supervisor if the SCBA no longer fits well or should they have difficulty when wearing or using it.
- Inform their supervisor or Program Administrator of any immediate respiratory hazards that they feel is not adequately addressed in the workplace.

B. Program Elements

Fit Testing

All employees that need to use respiratory protection, no matter what the length of time, shall be annually fit tested on the make, model, size and type of each respiratory protection equipment used. Current equipment requiring fit testing includes:

Scott AV 3000
ENVO N-95 mask
N95 mask

Employees will have a current medical evaluation at the time of any fit testing Fit testing will be conducted as follows;

- Prior to being allowed to use any SCBA.
- Annually
- When there are changes in the employee's physical condition that could affect respiratory fit (obvious changes in body weight, facial scarring, etc.)

The Program Administrator (Training Deputy) or his / her designated assistant will conduct fit tests as outlined in 29 CFR 1910.134.

Records of fit testing for each employee will be maintained.

Medical Evaluations

Personnel required to wear SCBA must pass a medical evaluation before being allowed to use one on the job. Without medical clearance from a physician the employee will not be permitted to use a SCBA.

A Licensed physician at the chosen medical facility, by the City of South Portland, for any given year, will provide the Medical evaluation. (Note: The Employee's own Physician may be consulted for this evaluation provided that said Physician complies with the guidelines as set by this Standard.)

The chosen physician (Or personal Physician) will use the attached questionnaire (attachment #1).

Follow up medical evaluations will be provided to employees as required by this standard, or as required by the physician.

All Employees will be granted the opportunity to speak with the physician about their medical evaluation, if they so request.

After an employee has been cleared to wear a SCBA, additional medical evaluations will be provided under the following circumstances:

- Employee reports signs and / or symptoms such as shortness of breath, dizziness, chest pains, or wheezing while using a SCBA.
- The physician or supervisor informs the Program Administrator that the employee needs to be reevaluated.
- A change occurs in the workplace that may result in an increased physiological burden on the employee.

All examinations, evaluations, and questionnaires are to remain confidential between the employee and the physician.

Hazard Evaluation

The Program Administrator has identified hazard types requiring the use of respiratory protection equipment:

- **Structural Firefighting:** All personnel of the South Portland Fire Department engaged in interior fire attack shall use SCBA until such time as overhaul is completed and an IDLH atmosphere no longer exists. Personnel engaged in exterior fire ground duties may be required to use SCBA when conditions warrant, depending on the operation and potential hazard encountered or as determined by the OIC, Safety Officer, or Company Officer.
- **Vehicle Fires:** Firefighters engaged in vehicle firefighting shall use SCBA while performing these operations.
- **Dumpster / Container Fires:** Firefighters engaged in vehicle firefighting shall use SCBA while performing these operations.
- **Hazardous Material (Haz-Mat) Incidents:** Firefighters engaged in Hazardous Materials Mitigation shall use SCBA whenever a firefighter is working in the Hot Zone, Warm Zone, or assigned to De-contamination duties and when the O.I.C. determines a necessity exists.
- **Weapons of Mass Destruction (WMD) incidents:** SCBA shall be used whenever a firefighter is initially working in the Hot Zone, Warm Zone, or De-contamination and when the O.I.C. determines a necessity exists. After evaluation of the agent, Command

may specify a lower level of respiratory protection.

- **Rescue Situations:** SCBA required at Rescue calls that may involve Confined Space, Below Grade, or any other situation that the atmosphere cannot be confirmed as having an O₂ level at or above 19.5%.
- **Biologic Exposures:** Envo N95 mask or N95 mask shall be worn when providers are treating patients with known or suspected communicable respiratory diseases.
- **Other Respiratory Hazards:** Nothing in this policy is intended to restrict the O.I.C. from requiring the use of SCBA when he/she suspects a potential respiratory hazard exists.

Periodic Program Evaluation

The Program Administrator shall revise and update this Standard annually and as needed (i.e. anytime new technology, new processes, or standards are made available that may affect the working environment (atmosphere) or has the potential to affect the employee's exposure to a hazardous respiratory environment.

C. General Use Procedures

Employees will use respiratory protection whenever conditions specified by this program exists and in accordance with the training received on the use of each particular respiratory protection equipment. The equipment shall not be used in a manner for which it is not certified by NIOSH or in a manner that is prohibited by the manufacturer.

All employees shall conduct a "User Seal Test" each time they don SCBA. This test shall be either a positive or a negative pressure check (whichever works best for the individual) as specified in Appendix B-1 of 29 CFR 1910.134 Respiratory Protection Standard.

Whenever an employee experiences or detects an operational problem or failure of their SCBA, he/she shall immediately notify their supervisor, sound their PASS alarm, and leave the IDLH atmosphere with their partner.

Jewelry, eyeglasses, ear protection, or protective hoods that may interfere with the face to face piece seal shall not be permitted. Hair styles or facial hair shall not interfere with the face to face piece seal.

Interior Structural Firefighting (Two-in / Two-out)

- SCBAs are required for IDLH atmospheres. (Interior attack at any structure fire is always IDLH.) A minimum of two firefighters must enter the structure and remain in visual and voice contact at all times (Two-in).
- Two firefighters must be on standby for immediate rescue of the interior team. Each member assigned to the standby team shall be dressed in full protective gear including SCBA. The standby team cannot be assigned to any other duty (Two-out).

- Nothing in this section is meant to preclude firefighters from performing “Emergency Rescue” activities before the entire team (Two-in / Two-out) has assembled. The following conditions apply and must be followed;
 - a.) Notify Dispatch of entry without the Two-out team.
 - b.) Enter with or without a charged hose line, effect a rescue, and immediately exit the IDLH atmosphere.
 - c.) After the incident, the O.I.C. shall submit to the Fire Chief a written report detailing the reason(s) for deviation from this policy.

Use Other than Interior Firefighting

SCBA usage is mandatory at any incident that the firefighter may be exposed to or where the atmosphere might change to IDLH and/or a respiratory hazard may exist.

Air Quality

SCBA cylinders shall be filled with Grade “D” compressed air only. The Program Administrator or Air Maintenance Officer shall ensure that the compressed air maintains Grade “D” quality at all times and that air compressors are serviced and tested at least annually.

Cleaning

SCBA shall be cleaned and disinfected after each use as per Departmental Policy.

Maintenance & Storage

SCBA are to be properly maintained at all times in order to ensure that they function properly and protect the employee. Maintenance involves a thorough visual inspection for fullness, cleanliness, and defects daily. Anytime the level on the gauge on the cylinder drops at or below 4000 lbs. that cylinder shall be removed and refilled to 4500 lbs. or until full. Worn or defective parts will be replaced prior to returning SCBA to service. All defective SCBAs will be referred to the Air Maintenance Officer for repairs or adjustments as needed. Any repair that exceeds the capability of the Air Maintenance Officer shall be completed only by the Manufacturer or at his designated repair facility.

SCBA are to be checked weekly by moving air through the regulator, checking the low air alarm, and the appropriate form filled out and returned to the Air Maintenance Officer. If during the weekly inspection or at any time that a SCBA is found to have a defect, the employee shall immediately notify his/her supervisor. Supervisor will notify Program Administrator or Air Maintenance Officer. The Program Administrator or the Air Maintenance Officer will decide to either remove the SCBA from service until repairs can be made or perform a simple repair if feasible.

SCBA units shall be stored in their designated place on the apparatus free from dust, dirt

grease etc.

N95 masks should be maintained and stored accordingly:

- Soiled mask should be replaced not cleaned.
- Always thoroughly wash hands after removing taking the mask off.
- After use, the mask should be wrapped in a plastic bag before disposal.
- Never share mask with others.
- Masks should be stored to protect them from contamination, dust, sunlight, extreme temperatures, excessive moisture, damaging chemicals, or other destructive conditions.
- Follow all storage precautions issued by the respiratory manufacturer.

D. Training

Training shall be administered annually and when the following situations occur:

- 1) Changes in the hazards members may be exposed to, or changes in the respirator used by the department.
- 2) Inadequacies in the member's knowledge or use of the respirator indicate the member has not retained the understanding or skill.
- 3) Any situations that arises which appears retraining may be necessary to ensure the safety of the members.

The respiratory protection training shall provide members with annual training in the following:

- 1) Safely donning and doffing
- 2) Uses and limitations
- 3) Consequences of improper fit or poor maintenance
- 4) Seal checks
- 5) Recognizing medical signs and symptoms that can impact respirator use.
- 6) Inspection of the respirator
- 7) Maintenance and storage
- 8) Member limitations
- 9) Decontamination and disposal procedures

Instruction on the common breakdowns that could cause injury should include:

- 1) Abuse and misuse of equipment
- 2) Physiological and psychological factors
- 3) Unapproved equipment
- 4) Buddy breathing
- 5) Accident data collected

Program Evaluation:

The program administrator shall annually and as necessary evaluate this Standard to ensure that;

- 1) The program is effective and properly implemented

- 2) The employees are using SCBA properly
- 3) The program is updated as new standards come into effect

E. Record Keeping

The program administrator, or his designee, shall keep and maintain all documentation in the areas of;

- 1) Medical Evaluations (physician recommendation only)
- 2) Fit Testing
- 3) Training

Reviewed	07-19-01
Reviewed	06-24-02
Reviewed	07-14-03
Reviewed	07-03-04
Reviewed	03-04-05
Revised	01-23-08
Revised	09-10-12
Reviewed	12-14-13
Reviewed	02-10-15
Reviewed	03-10-17
Reviewed	08-09-19
Reviewed	01-02-22
Reviewed	10/31/23

3. REFERENCES:

- None

By Order Of:



Phil Selberg
Fire Chief