	Standard Operating Policy: OPS3	
	Subject:	Respiratory Protection Program
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	Director:	William Ferguson

Respiratory Protection Program

This plan addresses respiratory protection, training, and fit testing requirements for employees and volunteers of Franklin County Department of Public Safety and in compliance with NFPA 1500 7.10 and OSHA standard 29 CFR 1910.134.

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1.0 Policy

The purpose of this program is to ensure that all providers required to wear respiratory protection as a condition of their affiliation with the Franklin County Department of Public Safety, hereinafter referred as 'FCDPS', are protected from respiratory hazards through the proper use of respirators. All respirator use will occur within the context of a comprehensive program as per the standards set forth by OSHA. This requires a written program, medical evaluation, training, and fit testing. See OSHA standard 29 CFR 1910.134 or www.osha.gov for additional information.

2.0 Program Scope and Application

This program is required for all career personnel and volunteer firefighters and EMS personnel who may require respiratory protection for the following reasons:

- The use of SCBA (Self-Contained Breathing Apparatus) including, but not limited to: firefighting, overhaul at fire scenes, fire investigations, and hazardous materials responses.
- The use of P100 Respirator (or comparable) in specific fire overhaul, fire investigation, and hazardous materials response.
- The use of Disposable Particulate Respirators (Minimum N95) for infection control purposes during normal work operations and during non-routine or emergency situations.

Not all providers within FCDPS perform all duties as outlined above, and therefore, this respiratory protection program will differentiate requirements, where necessary, according to two distinct protection responsibility levels:

Entry Firefighter: The Entry Firefighter is subjected to the maximum level of protection, due to his or her potential and inevitable exposure to an Immediate Danger to Life and Health (IDLH) conditions common to structural firefighting. The Entry Firefighter will complete requirements for SCBA level protection, P100 Respirator (or comparable) protection, and Disposable Particulate Respirator (Minimum of N95) protection. Entry level firefighters are certified at the minimum Virginia Department of Fire Programs Firefighter I level and Hazardous Material Operations.

Non-Entry Firefighter, EMS, and other responders: Any provider who has unplanned public interactions and/or responds to emergencies on behalf of FCDPS will be subject to the minimum requirements of respiratory protection for Infection Control (4.3.2). This includes providers affiliated with Fire Departments who do not perform entry, otherwise defined as "interior structural firefighting", as well as emergency medical providers without a fire affiliation will conform to the testing and maintenance responsibilities commiserate with Disposable Particulate Respirator (Minimum of N95) Protection.

Non-Covered Entity:

Any other entity within FCDPS acting in a support role, who does **NOT** meet the definition above are not required to conform to the testing requirements in this plan.

Providers affiliated with FCDPS have the responsibility to:

- Know the maximum level of protection required for their role.
- Attend and participate in required medical evaluations, fit testing, and training.
- Inspect respirators.
- Clean and properly store respirators after each use.
- Perform a face piece fit check for adequate seal each time a respirator is donned (Appendix B).

3 Program Structure, Administration, Oversight

- Program Administrator
- Program Stakeholders Roles and Responsibilities
- Program Scope/Application

3.1 Program Administration

Respiratory Program Administrator (RPA)

The Respiratory Program Administrator is responsible for administering the respiratory protection program. Duties of the RPA include:

- Maintain and oversee the Respirator Protection Program. Work in collaboration with the safety committee to implement and maintain current the Respiratory Protection Program.
- Schedule providers for the required respirator-medical evaluations, fit testing, and training.
- Maintain fit test records for the duration of provider affiliation (Fire or EMS).
- Maintain documentation that provider (Fire or EMS) has completed a medical evaluation for authorization to use a respirator.
- Maintain training records.
- Maintain inspection records for respirators
- Maintain records that Grade D air is provided to SCBA cylinders
- Conduct periodic evaluation of the program, implementing revisions as needed
- Identify work areas, processes, or tasks that require respiratory protection.
- Maintain Respiratory protection program document and update in collaboration with Safety Committee
- In collaboration with Safety Committee, Monitor OSHA/VOSH standards for changes and revise policy as needed.

- In collaboration with Safety Committee, Monitor CDC and DOH recommendations and guidelines as they relate to respiratory protection and other recommended infection control measures.
- Monitor respirator use to ensure that respirators are used in accordance with this program, training received, and manufacturer's instructions. Report to Safety Committee
- Coordinate medical evaluations with licensed healthcare professional.
- Arrange for and/or conduct training and fit testing.
- Ensure proper storage and maintenance of respiratory protection equipment.

3.2.2 Safety Committee (SC)

The Safety Committee is a designated entity, comprised of representatives from various sections/divisions of the FCDPS. The committee responsibilities as it relates to Respiratory Protection Program are:

- Review, recommend, and select respiratory protection products. Represent the needs of "front-line" users.
- Review findings and monitoring reports regarding utilization of respirators accordance with this program, training received, and manufacturer's instructions.
- Evaluate any feedback information or surveys.
- In collaboration with RPA, Monitor OSHA/VOSH standards for changes
- In collaboration with RPA, Monitor CDC and DOH recommendations and guidelines as they relate to respiratory protection and other recommended infection control measures.
- Review and recommend on changes to the Respiratory Protection Program.
- Monitor field operations for compliance

3.2.3 Medical Direction and Evaluation (Fire or EMS)

Respsafety is the program, approved by OSHA, FCDPS uses to complete the online medical evaluations. A licensed and practicing Physician will oversee the medical control and evaluation aspects of the Respiratory Protection Program. The Medical Director will participate in Safety Committee meetings and forums related to this program. The Medical Director will provide approvals for emergency variations to this plan. The Medical Director will participate in and sign off on the annual review of the Respiratory Protection Program.

3.2.4 Supervisors *or Designee*

Supervisors or designee are responsible for ensuring that the respiratory protection program is implemented for their particular shifts/departments. 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 providers under their charge.

Duties of the Supervisor include:

- Knowing the hazards in the area in which they work.
- Knowing types of respirators that need to be used.
- Ensuring the respirator program and worksite procedures are followed.
- Ensuring providers receive medical evaluations.
- Ensuring providers receive annual training and fit testing.
- Ensuring staff use respirators, as required.
- Notifying Respiratory Protection Program Administrator of any problems with respirator use or changes in work processes that would impact program.
- Ensuring proper storage and maintenance of respirators in their unit.
- Ensuring immediate correction or intervention upon any infraction

3.2.5 Providers (Fire or EMS)

"Provider" is an all-inclusive term that incorporates career and volunteer Fire and EMS personnel working within the FCDPS. Any 'provider' insured with VFIS via FCDPS and performing duties that may require respiratory protection are considered "Provider(s)" and are included within the scope of this plan.

- Participate in all training and fit testing
- Wear respirator when indicated
- Maintain equipment
- Inspect respirator and perform user seal check before every use
- Report malfunctions or concerns

4 Program Requirements and Protection Elements

- Identifying Work Hazards (permissible practice)
- Program Definitions
- Respirator Selection

4.1 Permissible Practice

For the emergency response community in general, engineering controls will be available in limited situations. Most often, the use of personal protective equipment (including respirators covered by this standard) will be the routine method for respiratory protection, thus allowing them to do their jobs or tasks with a reasonable degree of health and safety. Where feasible and effective, engineering controls such as forced air ventilation to move air and remove heat and air contaminants that may be in a building or structure, then use is to be made of these controls. However, where the engineering controls are not able to remove the hazard completely, respiratory protection is to be used to freely protect personnel in the hazardous atmosphere.

4.2 Definitions

Air-purifying respirator a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air purifying element.

Atmosphere-supply respirator a respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

Canister or cartridge a container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

Demand respirator an atmosphere-supplied respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation.

Emergency situation any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant.

Provider exposure an exposure ("airborne contact") to a concentration of an airborne contaminant that would occur if the provider were not using respiratory protection.

Entry Firefighter: a term codified in section 2 of this plan, The entry firefighter is subjected to the maximum level of protection, due to his or her potential and inevitable exposure to IDLH conditions common to structural firefighting. The entry firefighter will complete requirements for SCBA level protection, P100 Respirator (or comparable) protection, and Disposable Particulate Respirator (Minimum of N95) protection. At minimum, Virginia Department of Fire Programs Firefighter level I.

End-of-service-life indicator (ESLI) a system that warns the respirator user of the approach of the end of adequate respirator protection, for example, that sorbent is approaching saturation or is no longer effective.

Escape-only respirator a respirator intended to be used only for emergency exit.

FCDPS an abbreviation referring to the Franklin County Department of Public Safety

Filter of air purifying element a component used in respirators to remove solid or liquid aerosols from the inspired air.

Filtering face piece (dust mask) a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium.

Fit factor a quantitative estimate of the fit of a particular respirator to a specific individual and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

Fit test the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also Qualitative fit test QLFT and Quantitative fit test QNFT.)

Helmet a rigid respiratory inlet covering that also provides head protection against impact and penetration.

High efficiency particulate air (HEPA) filter a filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N 100, RI 00, and PI 00 filters.

Hood a respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.

Immediate danger to life or health (IDLH) an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

Interior structural firefighting the physical activity of suppression and or rescue inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage (See 29 CFR 1910.155)

Loose-fitting face piece a respirator inlet covering that is designed to form a partial seal with the face.

Negative pressure respirator (tightfitting) a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

Non-Entry Firefighter, EMS, and other responders: a term codified in section 2 of this plan, Any provider who has unplanned public interactions and/or responds to Emergencies on behalf of FCDPS will be subject to the minimum requirements of respiratory protection for Infection Control (4.3.2). This includes providers affiliated with Fire Departments who do not perform entry, otherwise defined as “Interior Structural Firefighting”, as well as Emergency Medical Providers without a Fire affiliation will conform to the testing and maintenance responsibilities commiserate with Disposable Particulate Respirator (Minimum of N95) Protection.

Oxygen deficient atmosphere an atmosphere with an oxygen content below 19.5% by volume.

Physician or other licensed health care professional (PLHCP) an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all the health care services required by paragraph (e) of this section.

Positive pressure respirator a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

Powered air-purifying respirator (PAPR) an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Pressure demand respirator a positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.

Qualitative fit test (QLFT) a pass or fail test to assess the adequacy or respirator fit that relies on the individual' s response to the test agent.

Quantitative fit test (QNFT) an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Respiratory inlet covering that portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. It may be a facepiece, helmet, hood, suit, or a mouthpiece respirator with nose clamp.

Self-contained breathing apparatus (SCBA) an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

Service life the period of time that a respirator, filter or sorbent or other respirator equipment provides adequate protection to the wearer.

Supplied-air respirator (SAR) or airline respirator an atmosphere-supplying respirator for which the source of breathing air is not desiY1ed to be carried by the user.

Tight-fitting face piece a respiratory inlet covering that forms a complete seal with the face.

User seal check an action conducted by the respiratory user to determine if the respirator is properly seated to the face.

4.3 Respirator Selection and Use

Respirators shall be worn when the provider is working in environments where air contaminants are likely to be above the OSHA permissible exposure limit. These environments have been defined in lay terms and outlined in Appendix F.

Employers/department heads shall not permit respirators with tight-fitting face-pieces to be worn by employees/members who have facial hair that comes between the sealing surface of the face-piece and the face or that interferes with valve function. (OSHA standard 29 CFR 1910.134)

4.3.1 Interior Structural Firefighting and Initial Haz-Mat Response

Since firefighting hazards are so unpredictable, it would be almost impossible to identify or reasonably estimate all workplace hazards. Therefore, when engaged in **interior structural firefighting** the atmosphere shall be considered immediately dangerous to life or health (IDLH). The approved respirator shall have a full facepiece, pressure demand, self-contained breathing apparatus (SCBA) certified by NIOSH for a minimum of thirty (30) minutes. Service life is 15 years for cylinder and cannot be extended. The SCBA Must be worn when:

- Oxygen deficiency (less than 19.5% oxygen) exists.
- Toxic products of combustion may be present.
- Carbon Monoxide levels of 30 ppm or greater.
- The atmosphere is immediately dangerous to life and health (IDLH), suspected of being IDLH, or unknown.
- Air contaminants are present in concentrations above the OSHA permissible exposure limit, and no other effective respirator for that contaminant is available for those concentrations.

4.3.1.1 Salvage and Overhaul after *Interior Structural Firefighting* (Exception)

During salvage and overhaul, following gas meter level testing, when the incident commander can demonstrate that under all foreseeable conditions, oxygen levels between 19.5% and 23.5% can be maintained, CO levels are below 35 PPM, and the HCN levels are below 5 PPM, providers will be allowed to use a high efficiency particulate air (HEPA) filters certified by NOSH under 30 CFR Part 11 may be used for this operation only. The said filter shall be a Type 100 (N 100, R 100, or P 100). This operation requires a V-BAR adapter (for twin cartridges). Regardless of oxygen, HCN, or carbon monoxide levels, a minimum level of an N95 shall be worn throughout the duration of the incident.

4.3.1.2 **Fire Investigations *after Interior Structural Firefighting* (Exception)**

During the investigation, and following gas meter level testing, when the incident commander can demonstrate that under all foreseeable conditions, oxygen levels between 19.5% and 23.5% can be maintained, CO levels are below 35 PPM, and the HCN levels are below 5 PPM, providers will be allowed to use a high efficiency particulate air (HEPA) filters certified by NOSH under 30 CFR Part 11 may be used for this operation only. The said filter shall be a Type 100 (N 100, R 100, or P 100). This operation requires a V-BAR adapter (for twin cartridges). Regardless of oxygen, HCN, or carbon monoxide levels, a minimum level of an N95 shall be worn throughout the duration of the investigation.

4.3.2 **Infection Control**

Infection control measures are situational and employed by the provider when there is a reasonable suspicion that a patient, bystander, or any other member of the community may have an airborne or bloodborne transmittable ailment. The provider will wear a minimum protection of 'N-95' disposable particulate respirator. When information is limited, the provider will wear 'N-95' minimum level protection until information about their environment becomes available.

4.3.3 **Identifying Work Hazards**

The respirators selected will be used as personal protection as part of an overall infection control and provider safety plan which incorporates engineering and work practice controls.

FCDPS will follow the most current CDC and Virginia Department of Health (VDH) Guidance on appropriate infection control practices. This guidance is expected to influence advisories and direction issued to providers regarding the application of N-95 or greater protections pursuant to "4.3.2 Infection Control".

Routine infection control and isolation practices for typical work situations are well known and tend to remain consistent over time. However, during an outbreak of a new virus type or pandemic flu, infection control guidance may change as the situation unfolds, based on available epidemiological data. In these situations, it will be the responsibility of the respiratory protection program manager to keep current with CDC/VDH recommendation. The program will be adjusted, and providers will be kept informed as changes occur.

Appendix F outlines specific expectations for provider respirator selection based on specific tasks and is intended to supplement, not supersede, the above direction.

5 Medical Evaluation

As outlined in Section 2.0, not all providers affiliated with FCDPS are required to wear SCBA. Any provider who has unplanned public interactions and/or responds to emergencies will be subject to the minimum requirements of respiratory protection for Infection Control (4.3.2).

Medical Evaluation guidelines are outlined for the maximum type of protection possibly required for the provider to execute job duties.

Persons assigned to tasks that require respiratory protection must be physically able to perform the tasks while wearing a respirator. FCDPS will provide an annual medical evaluation to determine the provider's ability to use a respirator before the provider is fit tested or required to use the respirator in the workplace. A physician or other health care professional (PLHCP) will perform the medical evaluations using the OSHA mandatory medical questionnaire (see Appendix A) and/or performing an initial medical examination that obtains the same information as the medical questionnaire.

A follow-up medical examination will be provided for any provider who gives a positive response to any question among questions 1 through 8 in Section 2, part A or whose initial medical examination demonstrates the need for a follow-up examination. Following a medical examination, FCDPS shall be provided a written recommendation regarding the provider's ability to use a respirator and any restrictions indicated.

All medical questionnaires and examinations shall be administered in a confidential manner during the provider's normal FCDPS work hours (or at a time and place convenient to the provider). The provider will also be provided the opportunity to discuss the questionnaire and/or results of the examination with the PLHCP.

5. 1 **Purpose**: The medical evaluation for authorization to use a respirator ensures that the individual is physiologically able to wear a respirator. Ref: 29 CFR 1910.134(e)(1)

5.2 **Scope**: Each individual affiliated will be required to use a respirator must complete a medical evaluation for authorization to use the respirator. The medical evaluation will be commiserate with the maximum protection level, as outlined by Section 2. Ref: 29 CFR 1910.134(e)

5.3 **Frequency**: The individual must have documentation that they are medically authorized to use a respirator before performing any tasks that
require the use of a respirator.

5.3.1 **New Affiliations**: Individuals newly affiliated after 4/1/2021 will complete a medical evaluation for respirator use. Ref: 1910.134(e)(1)

5.3.2 **Re-Evaluation**: Those individuals currently affiliated shall be subject to re-evaluation using the medical evaluation questionnaire when the following conditions occur, as listed in the OSHA Respirator standard 29 CFR 1910.134 (e)(7).

i. Provider reports signs or symptoms that are related to ability to wear a respirator; (wheezing, shortness of breath, chest pain, etc.); OR

ii. A healthcare provider, supervisor, the safety committee, or a EMS / Fire Department Officer informs the RPA that an individual needs to be reevaluated; OR
iii. Information from the respirator program, including observations made during fit testing, indicate the need for a reevaluation.
iv. A change occurs in work conditions (i.e. physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an individual while wearing a respirator; OR
v. Provider facial size/shape/structure has changed significantly.

5.4 Contents of Medical Evaluation for Authorization to Use a Respirator

5.4.1 Complete the OSHA Respirator questionnaire before an individual is assigned to wear a respirator. The specific contents of the questionnaire are mandatory, as provided in the OSHA respirator standard 29 CFR 1910.134 Appendix C.

5.4.2 The medical questionnaire must be reviewed by a trained healthcare professional. A Licensed Healthcare professional must be accessible to the trained agent performing review.

5.4.3 Based on evaluation of the questionnaire, the healthcare provider may authorize an individual for respirator use or may refer the individual for pulmonary function testing. Ref: 29 CFR 1910.134(e)(3)

5.4.4 Pulmonary Function Tests (spirometry). A healthcare provider may request diagnostic tests, including a pulmonary function test, to make a determination for respirator use.

5.5 Documentation

5.5.1 The RPA will provide a statement to the individual's department that the individual is or is not, authorized to use a respirator. The documentation should include the date of the evaluation, individual's name, physician's name and contact information.

5.5.2 The documentation should not include any personal medical information, questionnaire answers or pulmonary function test results.

Ref: 29 CFR 1910.134(e)(6)(i) , 29 CFR 1910.134(m)(1)

6.0 Breathing air quality for SCBA Cylinders

- SCBA 'bottle' Standards
- SCBA Fill Station Standards (Air Compressors)
- SCBA Documentation Requirements

6.1 Breathing Air in SCBA cylinder must meet at least the requirements for Grade D breathing air described in ANSI/ Compressed Gas Association G-7.1 – 1989, Commodity Specification for Air.
Additionally, The following standards will be met:
6.1.1 Oxygen content (v/v) of 19.5-23.5%;
6.1.2 Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;
6.1.3 Carbon monoxide (CO) content of 10 ppm or less;
6.1.4 Carbon dioxide content of 1,000 ppm or less;
6.1.5 Lack of noticeable odor.

6.2 3'rd party purchased air cylinders When air cylinders are purchased through a third party a certification that the air in the cylinders meets the specifications of Grade D breathing air will be kept on file.

6.3 Air fill compressors When using air from a compressor, the following must be met:

6.3.1 Compressor Types (Non-Oil v. Oil):

6.3.1.1 For oil-lubricated compressors, FCDPS shall use a high-temperature or carbon monoxide alarm, or both, to monitor carbon monoxide levels. If only high-temperature alarms are used, the air supply shall be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm. An in-line air purifying filter will be maintained on the oil-lubricated compressor

6.3.1.2 For compressors that are not oil-lubricated, FCDPS shall ensure that carbon monoxide levels in the breathing air do not exceed 10 ppm.

6.3.2 Prevent entry of contaminated air into the air-supply system;

6.3.3 Minimize moisture content so that the dew point at 1 atmosphere pressure is IO OF (5.56 0C) below the ambient temperature;

6.3.4 Have suitable in-line air purifying sorbent beds and filters to further ensure breathing air quality. Sorbent beds and filters shall be maintained and replaced or refurbished periodically following the manufacture' s instructions.

6.3.5 Have a tag containing the most recent change date and the signature of the person authorized by the FCDPS to perform the change. The tag shall be maintained at the compressor.

6.3.6 FCDPS maintains a roster (address, building name, compressor ID) of approved air compressors under this plan. See Appendix E: Air Compressor Checkoff

6.4 Training: SCBA air cylinders shall be filled by personnel trained to use the compressor equipment.

6.5 Storage: SCBA air cylinders must be stored in a fully charged state and shall be recharged when pressure falls to 90% of manufacturer's recommended pressure level.

6.6 Couplings: FCDPS shall ensure that breathing air couplings are incompatible with outlets for non-respirable worksite air or other gas systems. No asphyxiating substance shall be introduced into breathing airlines. FCDPS shall use breathing gas containers marked in accordance with the NIOSH respirator certification standard, 42 CFR part 84.

6.7 Hydrostatic Testing: SCBA cylinders are required to be hydrostatically tested every 5 years. The RPA, or designee, will maintain records and inventory identification for SCBA Cylinders and their hydrostatic testing.
SCBAs are tested by trained, manufacturer approved vendors. Records are kept with RPA.

7.0 Cleaning, Inspection, Maintenance, and Storage

- Cleaning and Disinfecting
- Inspection and Storage

7.1 Cleaning (SCBA)

7.1.1 Follow the manufacturer's owner's manual for cleaning, and maintenance.
7.1.2 All SCBAs and reusable respirators are to be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.
7.1.3 Respirators issued to more than one individual shall be cleaned and disinfected before being worn by a different individual.
7.1.4 SCBA cleaning expectations are outlined in Appendix D: SCBA

7.2 Cleaning (Disposable Particulate Respirator)

7.2.1 A disposable particulate respirator can not be cleaned or disinfected. There is no specific time limit for how long an N95 respirator can be used.

7.2.2 Conditions of Reuse/Disposal:

7.2.2.1 If the medical condition requires only airborne isolation precautions (e.g., TB): Discard the respirator if it is soiled, if breathing becomes labored, or if structural integrity is compromised.

7.2.2.2 If condition also requires contact and/or droplet precautions:
- The respirator must be discarded after a single use. All PPE should be removed and disposed of in a receptacle prior to or upon exiting a patient room and hand hygiene performed immediately.

- However, in times of shortage, consideration can be given to covering the respirator with a surgical mask and discarding the mask after use but reusing the respirator. This decision will be made by the RPA in coordination as time permits with the Safety

Committee. Decisions will be based on the available supply and current epidemiological data and will be communicated clearly to staff.

7.3 Inspection

7.3.1 Inspect respirators at the beginning of each shift or operational period, during cleaning and before placing the respirator back in storage.

7.3.1.1 The disposable respirator should be examined for structural integrity.

7.3.1.2 Discard if there are nicks, abrasions, cuts, or creases in seal area or if the filter material is physically damaged or soiled.

7.3.1.3 Check respirator straps to confirm elasticity and integrity.

7.3.1.4 Confirm bendable metal clips and parts are in tact (where applicable).

7.3.2 Conduct inspection of SCBAs. At minimum, SCBAs should be inspected on a weekly basis and results documented. Career staffed unit will complete a daily inspection of SCBAs and document the results in the daily inspection report in ESO.

7.3.3 Follow manufacturer's owner's manual for inspection instructions and checklists. Inspect components such as facepiece, valves, faceshield, straps, hose, regulators, harnesses, cylinder condition and alarms.

7.3.4 Inspect that SCBA regulator and warning devices function properly.

7.4 Defective Respirators

7.4.1 Respirators that are defective or have defective parts shall be taken out of service immediately.

7.5 Maintenance

7.5.1 Maintain and service respirators according to manufacturer instructions.

7.5.2 Repairs to regulators, alarms, and reducing and admission valves shall be conducted only by the manufacturer or a technician trained by the manufacturer.

7.6 Storage: Store respirators in a manner that prevents deformation of the face seal, other damage, or contamination.

7.6.1 Store disposable particulate respirators in a clean, dry area away from direct sunlight and extreme heat. The RPA will periodically inspect a representative sample of respirators in storage to ensure they are in usable condition.

8.0 Respirator Fit Testing

- Respirator Fit Testing

8.1 Purpose

8.1.1 The purpose of the respirator fit test is to ensure that contaminants do not leak into the facepiece and to identify the correct size facepiece for each individual (make, model and size).

8.1.2 Fit testing may be performed by FCDPS or an outside vendor.

8.1.3 The Fit Test evaluates facepiece leakage. The fit test is NOT a medical authorization to use a respirator.

8.1.4 Fit testing will be executed according to the specifications in Appendix B

8.2 Scope: Each individual required to use a respirator must be fit tested on each manufacturer make/model that the individual will wear. This includes:

- SCBA;
- Air purifying respirators

8.3 Frequency: The Fit Test must be conducted with the same manufacturer, model, and size that the person uses. The Fit Test must be completed:

- Prior to the first time using the manufacturer/model and size of the respirator.
- Annually.
- When there are changes in the individual's physical condition that could affect the face seal (e.g., weight, dentures, facial scarring, etc.).

8.4 Type of Fit Test

- Fit tests can be qualitative of quantitative.
- A Qualitative fit test requires the user to report leakage of a test agent into the facepiece.
- A Quantitative fit test uses an instrument to measure the presence of a test agent outside and inside the facepiece, and give a numerical result.

8.5 Documentation

- FCDPS shall maintain records of individual fit tests.
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9.0 Training

9.1 **Scope**: Training is required for all individuals who are required to use respirators in their job function.

9.2 **Frequency**: Training must be provided before an individual first wears a respirator, and annually after that. The RPA and/or Trained Designee shall be responsible for ensuring

completion of training. Annual SCBA competency training is required for all active career and volunteer entry level firefighters.

9.3 **Effectiveness**: Training is performance-based. On an annual basis, the individual must be able to demonstrate knowledge of contents listed in Section 9.4 and/or 9.5 Depending on work requirements. See below:

9.4 **Baseline Training** (For SCBA or Disposable Particulate Respirator)

- Types of respiratory hazards encountered
- Components of the FCDPS Respiratory protection program
- Instruction in the use of respirators:
    - When use of respirators is required
    - Inspection procedures prior to use
    - Seal check and adjusting for comfort
- Differentiating between respirators in evolving environmental conditions
- Types of respirators used at the workplace, capabilities, and limitations
- Fit testing requirements
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators
- Explaining respirator program (policies, procedures, OSHA standard, resources)

9.4 **Annual Module Content of SCBA training.**

- Wearing of SCBA respirator
- Components of respirators
- How to respond to SCBA respirator malfunctions
- SCBA Air Management, and cylinder alarm procedures
- SCBA cylinder filling
- Cleaning, maintenance and storage of the SCBA

9.5 **Module Content of Disposable Particulate Respirator Training (N95 or similar)**

- Other required PPE if needed
- Respirator fit, improper fit, usage, limitations, and capabilities
- Usage and storage of the disposable particulate respirator
- Inspecting, donning, removal, seal check and trouble shooting

9.6 Training records (initial and annual) will be maintained for all providers in a manner comparable to ‘Appendix C – Training Record Form’. *The Training Program is administered in accordance with 29 CFR 1910.134(k), 29 CFR 1910.134(k)(3),*

Training program is further outlined in Appendix B – Provider Education

10.0 Program Evaluation

The Respirator Program will be reviewed annually by the department for compliance, advancement, and evaluation. The review should cover the following topics, at minimum:

- Adequacy of the respirator being used.
- Incidents in which the respirator has failed to provide adequate protection; and,
- Adequacy of training and maintenance on the use of respirator.
- Potential changes to and recommendations for the program.

The Safety committee will work with the RPA to administer and review findings of the program evaluation in accordance with 29 CFR 1910.134(l)

11.0 Record Maintenance under this Respiratory Protection Program

- Documentation and Record-keeping

The following records will be maintained:

11.1 Medical evaluation: letter from healthcare professional that each individual is medically cleared to wear a respirator. (for Firefighter/EMS affiliated with FCDPS-Volunteer and Career).

11.2 Fit test record (initial and annual)

11.3 Training record (initial and annual)

11.4 Air cylinder purchases, certification of air quality.

11.5 SCBA respirator inspection records (monthly)

11.6 SCBA Air compressors conformity to standards Section 6 (Upon installation, and annual)

Documentation is maintained in accordance with 29 CFR 1910.134(m)(1), 29 CFR 1910.134(m)(2), 29 CFR 1910.134(i)(4(ii)), 29 CFR 1910.134(h)(3)(iii)

12.0 Procedures for proper respirator use

- Minimum Use Expectations

12.1 Respirators: shall be used in accordance with its NIOSH certification and manufacturer instruction.

12.2: Facial Hair: Persons required to use a respirator shall not have facial hair that interferes with the facepiece seal or inhalation/exhalation valves (OSHA 1910.134g1iA).

Fit-testing can only be conducted when the firefighter presents him or herself **free of facial hair** in the sealing surface of the SCBA face piece. Testing agencies or test administrators may be in violation with the OSHA Standard if they administer a fit-test on a subject with facial hair in the sealing surface. The (fit) test shall not be conducted if there is any hair growth between the skin and face piece sealing surface, such as stubble beard growth, beard, mustache or sideburns which cross the respirator sealing surface. OSHA 1910.134(f)(3) further states, the employer shall conduct an additional fit test whenever the employee reports, or the employer, supervisor, or program administrator makes visual observations of, changes in the employee's physical condition that could affect respirator fit". This places a responsibility on fire company officers to conduct fit testing at any point in the year if a firefighter presents with a beard, for example in No-Shave November. **The firefighter may not be permitted to perform interior structural firefighting and other duties in an IDLH environment, including overhaul until fit-testing is passed.**

12.3 Eyeglasses: Persons who require corrective eyeglasses should not wear the eyeglasses with a full-face respirator, since the eyeglass frame can interfere with the face-to-facepiece seal. Obtain an eyeglass insert provided by the respirator manufacturer. The provider is responsible for paying for the eye examination to determine lens correction and frame size. The employer is responsible for paying for the eyeglass insert.

12.4 Seal Check: Conduct a user seal check each time a respirator is put on. Persons using a respirator may not have any condition, such as facial scars, facial hair, or missing dentures, that prevents them from achieving a good facepiece seal. Individuals are not permitted to wear headphones, jewelry, or other articles that may interfere with the facepiece-to-face seal.

12.5 SCBA Cylinder Air Management: SCBA cylinders must have a minimum working life rating of 30 minutes. The service life of the cylinder is 15 years. There is no service life for the pack assembly, as long as it passes the hydro test. Personnel shall leave the IDLH when the cylinder low air alarm is activated. The alarm must activate when the apparatus is reduced to within 33% of its rated service time.

Record of Appendices

Appendix A - Medical Questionnaire

This form is comparable to the FCDPS Formatted Paper or comparable electronic form.

Instructions: Please complete this form BEFORE your Respirator Fit Test and return to:
FCDPS, Respiratory Protection Administrator - 1488 Franklin Street - Rocky Mount, VA 24151
Can you read? (circle one): Yes No

Part A. Section 1. Please Print
Your name: _____

Date ___/_____/_____ Your age (nearest year):_____ Sex (circle one): Male/Female

Your height: ____ ft. ____ in. Your weight: _____lbs.
Your FCDPS title: _____
Department (Agency): _____
Phone number: _____ Best time to call: _____
Have you worn a respirator (circle one): Yes/No
If "yes," what type(s)? _____

Part A. Section 2. (Mandatory) Questions 1 through 9 must be answered by every provider selected to use a respirator. Please check "YES" or "NO" for each question.

Questions		**YES**	**NO**
1. Do you currently smoke tobacco, or have you smoked tobacco in the last month?			
2. Have you ever had any of the following conditions?		**YES**	**NO**
a.	Seizures (fits)		
b.	Diabetes (sugar disease)		
c.	Allergic reactions that interfere with your breathing		
d.	Claustrophobia (fear of closed-in places)		
e.	Trouble smelling odors		
3. Have you ever had any of the following pulmonary or lung problems?		**YES**	**NO**
a.	Asbestosis		
b.	Asthma		
c.	Chronic bronchitis		
d.	Emphysema		
e.	Pneumonia		
f.	Tuberculosis		
g.	Silicosis		
h.	Pneumothorax (collapsed lung)		
i	Lung cancer		
j.	Broken ribs		
k.	Any chest injuries or surgeries		
l.	Any other lung problem that you've been told about		
4. Do you currently have any of the following symptoms of pulmonary or lung illness:		**YES**	**NO**
a.	Shortness of breath		
b.	Shortness of breath when walking fast on level ground or walking up a slight hill or incline		
c.	Shortness of breath when walking with other people at an ordinary pace on level ground		
d.	Have to stop for breath when walking at your own pace on level ground		

e.	Shortness of breath when washing or dressing yourself		
f.	Shortness of breath that interferes with your job		
g.	Coughing that produces phlegm (thick sputum)		
h.	Coughing that wakes you early in the morning		
i.	Coughing that occurs mostly when you are lying down		
j.	Coughing up blood in the last month		
k.	Wheezing		
l.	Wheezing that interferes with your job		
m.	Chest pain when you breathe deeply		
n.	Any other symptoms that you think may be related to lung problems		
5. Have you ever had any of the following cardiovascular or heart problems?		**YES**	**NO**
a.	Heart attack		
b.	Stroke		
c.	Angina		
d.	Heart failure		
e.	Swelling in your legs or feet (not caused by walking)		
f.	Heart arrhythmia (heart beating irregularly)		
g.	High blood pressure		
h.	Any other heart problem that you've been told about		
6. Have you ever had any of the following cardiovascular or heart symptoms?		**YES**	**NO**
a.	Frequent pain or tightness in your chest		
b.	Pain or tightness in your chest during physical activity		
c.	Pain or tightness in your chest that interferes with your job		
d.	In the past two years, have you noticed your heart skipping or missing a beat?		
e.	Heartburn or indigestion that is not related to eating		
f.	Any other symptoms that you think may be related to heart or circulation problems		
7. Do you currently take medication for any of the following problems?		**YES**	**NO**
a.	Breathing or lung problems		
b.	Heart trouble		
c.	Blood pressure		
d.	Seizures (fits)		
8. Have you ever used a respirator? IF NO, go to question 9. If you HAVE used a respirator, have you ever had any of the following problems?		**YES**	**NO**
a.	Eye irritation:		
b.	Skin allergies or rashes		
c.	Anxiety:		
d.	General weakness or fatigue?		
e.	Any other problem that interferes with your use of a respirator		
9. Would you like to talk to a health care professional about your answers to this questionnaire?			

Question 10 to 15 below must be answered by every provider who has been selected to use either a full-facepiece respirator or self-contained breathing apparatus (SCBA). For providers who have been selected to use other types of respirators, answering these questions is voluntary.	**YES**	**NO**
10. **Have you ever lost vision in either eye (temporarily or permanently)**		

11. **Do you currently have any of the following vision problems?**		**YES**	**NO**
a.	Wear contact lenses		
b.	Wear glasses		
c.	Color blindness		
d.	Any other eye or vision problems		
e.	Any other problem that interferes with your use of a respirator		
12. Have you ever had an injury to your ears, including a broken ear drum?			
13. Do you currently have any of the following hearing problems?			
a.	Difficulty Hearing		
b.	Wear a hearing aide		
c.	Any other hearing problems?		
14. Have you ever had a back injury?			
15. Do you currently have any of the following musculoskeletal problems?			
A	Weakness in any of your arms, hands, legs, or feet		
B	Back Pain		
C	Difficulty fully moving your arms and legs		
D	Pain or stiffness when you lean forward or backward at the waist		
E	Difficulty fully moving your head up or down		
F	Difficulty fully moving your head side to side		
G	Difficulty bending at your knees		
H	Difficulty squatting to the ground		
I	Climbing a flight of stairs or a ladder carrying more than 25lbs.		
J	Any other muscle or skeletal problem that interferes with using a respirator		

To the Reviewer

Check √ the <u>ONE</u> that applies

- ☐ I have reviewed Part A Section 2 of this questionnaire <u>with</u> the provider and <u>I do not recommend</u> that a physical examination be performed.
- ☐ I have reviewed Part A Section 2 of this questionnaire <u>with</u> the provider and <u>I am recommending</u> that a physical examination be performed.
- ☐ I have reviewed Part A section 2 of this questionnaire <u>without</u> the provider and <u>I do not recommend</u> that a physical examination be performed.
- ☐ I have reviewed Part A Section 2 of this question <u>without</u> the provider and <u>I am recommending</u> that a physical examination be performed.

Appendix B: Provider Training and Fit Test Procedure for Qualitative Fit Test

Equipment:

Hood & Collar (Note: some fit test kits are designed to use only the hood, not with a collar. Adapt instructions as necessary)
Fit Test Solution (Saccharin or Bitrex – whichever is used above.)
Sensitivity Solution (Saccharin or Bitrex)
Nebulizer #1 (Sensitivity)
Nebulizer #2 (Fit Test)
N 95 Respirators – selection of several
SCBA Mask – Selection of several
Timer/clock
Water and drinking glasses
Mirror

Preparation:

1. Attach hood to collar by placing drawstring between flanges on collar. Tighten drawstring and tie with square knot or bow. (For equipment without a collar, follow manufacturer's instructions)
2. Pour a small amount (approximately one teaspoon) of Sensitivity Solution (solution #1) into nebulizer #1.
3. Pour a small amount (approximately one teaspoon) of Fit Test Solution (solution #2) into nebulizer #2.
4. Immediately recap the bottles.
5. Change solution every 4 hours; discard at end of day or after last testing procedure.

Sensitivity test:

This test is done to assure that the person being fit tested can detect either the sweet or the bitter taste of the test solution at very low levels. The Sensitivity Test Solution is a very dilute version of the Fit Test Solution. **The test subject should not eat, drink (except water), or chew gum for 15 minutes before the test.**

1. Have the test subject put on the hood and collar assembly without a respirator.
2. Position the hood assembly forward so that there is about six inches between the subject's face and the hood window.
3. Instruct the test subject to breathe through his/her mouth with tongue extended.
4. Using **Nebulizer #1 with the Sensitivity Test Solution (#1),** inject the aerosol into the hood through the hole in the hood window**.**
   •**Inject ten squeezes** of the bulb, fully collapsing and allowing the bulb to expand fully on each squeeze.
   •Both plugs on the nebulizer must be removed from the openings during use.
   •The nebulizer must be held in an upright position to ensure aerosol generation.
5. Ask the test subject if he/she can detect the sweet or bitter taste of the solution. If tasted, **note the number of squeezes as 10** and proceed to the Fit Test.

6. If not tasted, inject an additional ten squeezes of the aerosol into the hood. Repeat with ten more squeezes if necessary. Note whether 20 or 30 squeezes produced a taste response.
7. **If 30 squeezes are inadequate, in that the subject does not detect the sweet or bitter taste, the test is ended. Another type of fit test must be used.**
8. Remove the test hood and give the subject a few minutes to clear the taste from his/her mouth. It may be helpful to have the subject rinse his/her mouth with water.

Appendix B: Provider Education

This can be done before or after the sensitivity procedure.

Education of providers shall include:

1 Review written Respiratory Protection Program

2 Description of the use of the respirator for patient care and/or public health emergency response protection from infectious diseases such as measles, varicella, smallpox, tuberculosis, SARS, or pandemic influenza.

3 Importance of proper fit; consequences of improper fit, how improper use, storage, or failure to inspect can compromise protective effect

4 Limitations:

4.3 mask intended for biologic agents

4.4 not a 100% guarantee; limits but does not totally eliminate the risk ○ does not protect against gasses, vapors, oil, aerosol, asbestos, arsenic, cadmium, lead, sandblasting

4.5 mask does not supply oxygen

4.6 do not use with beards or facial hair that can obstruct a good seal

5 Respirator malfunction:

5.3 If respirator becomes damaged or soiled, a leak is detected, or breathing becomes difficult, leave the contaminated area immediately and replace the respirator.

6 Review manufacturer instruction sheet on proper donning, user seal check, and removal of respirator

7 Storage, Cleaning and Reuse:

7.3 Store in clean, dry area with no exposure to direct sunlight or temperature extremes.

7.4 Do not crush respirator

7.5 Respirators can not be cleaned or disinfected

7.6 There are no manufacturer recommendations on time use limit.

7.7 If the medical condition requires only airborne precautions (e.g., TB):

7.7.1 Discard the respirator if it is soiled, if breathing becomes labored, or if structural integrity is compromised.

7.8 If the condition also requires contact and/or droplet precautions:

7.8.1 The respirator must be discarded after a single use. However, in times of shortage, users may be instructed to cover the respirator with a surgical mask and discard the mask after use but reuse the respirator. This decision will be made by the Respiratory Protection Program Administrator based on supply and available epidemiological data and will be communicated clearly to staff.

Facepiece Fit

The individual shall be allowed to pick the most acceptable respirator from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user. The individual shall be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine acceptable fit. A mirror may be helpful in assisting the individual in positioning of the respirator. The respirator is donned as per manufacturer's instructions.

Assessment of comfort and fit shall include a review of these points with the individual and allowing the individual adequate time to determine the comfort of the respirator:

- Position of the mask on the nose
- Room for eye protection
- Room to talk
- Position of mask on face and cheeks

These criteria shall be used to help determine the adequacy of the respirator fit:

- Chin properly placed
- Adequate strap tension, not overly tightened
- Fit across nose bridge
- Respirator of proper size to span distance from nose to chin
- Tendency of respirator to slip

Appendix B: User Seal Check

The individual shall conduct a user seal check, using the procedure recommended by the respirator manufacturer. If the provider fails the user seal check, reposition and adjust the respirator and try again. If still unsuccessful, another mask shall be selected and a user seal check performed. Remind providers that they must **perform a user seal check** to ensure that an adequate seal is achieved **each time the respirator is put on** using the respirator manufacturer's recommended user seal check method. User seal checks are not substitutes for fit tests.

Appendix B: Reasons to Delay or Defer Fit Test

The fit test shall not be conducted if there is any hair growth between the skin and the face piece sealing surface, such as stubble beard growth, beard, mustache or sideburns that cross the respirator sealing surface. Any type of apparel that interferes with a satisfactory fit shall be altered or removed.

If an individual exhibits breathing difficulty during the tests, he or she shall be referred to a physician or other licensed health-care professional, as appropriate, to determine whether the individual can wear a respirator while performing his or her duties.

If the individual finds the fit of the respirator unacceptable, he or she shall be given the opportunity to select a different respirator and be retested.

Appendix B: Fit Test Performance steps

1. Have the test subject don the respirator and perform a user seal check.
2. Before beginning, describe the fit-test process, the exercises the provider will perform, and the individual's responsibility to immediately signal the instructor if they taste the fit test solution or have any physical distress during the test procedure.
3. Have the subject put on and position the test hood as before, and breathe through his/her mouth with tongue extended.
4. Using **Nebulizer #2 with Fit Test Solution (#2),** spray the fit test aerosol using the **same number of squeezes as required in the Sensitivity Test** (10, 20, or 30) for each exercise.
5. A minimum of ten squeezes is required, fully collapsing and allowing the bulb to expand fully on each squeeze. The nebulizer must be held in an upright position to ensure aerosol generation.
6. To maintain an adequate concentration of aerosol during this test**, inject one-half the number of squeezes** (5, 10, or 15) every 30 seconds for the duration of the fit test procedure.

After the initial injection of aerosol, ask the test subject to perform the following test exercises for **60 seconds each**:

Normal breathing — In a standing position, without talking, the subject shall breathe normally.
Deep breathing — In a standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.
Turning head side to side —Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.
Moving head up and down —Standing in place, the subject shall slowly move his/her head up and down.
Talking — The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text, count backward from 100, or recite a memorized poem or song.
Bending Over -- The individual shall bend at the waist as if he or she were to touch his or her toes. Jogging in place can be substituted for this exercise in those tests environments such as shroud type QLFT units that do not permit bending over at the waist.
Normal Breathing -- In a normal standing position, without talking, the individual shall breathe normally.

Each test exercise shall be performed for one minute. The individual shall be questioned by the test conductor regarding the comfort and fit of the respirator upon completion of the protocol. If it is unacceptable, another model of respirator shall be tried.

If the bulb of the nebulizer becomes difficult to squeeze or when you squeeze there is no visible mist released, check to be sure there is sufficient fit test solution and that the opening from the rubber bulb into the solution chamber is not clogged. Remove the small plastic piece

and Insert the thin looped wire into the hole to unclog it. Also check the hole in the little plastic piece to be sure this is not clogged.

When the fit tests are complete, record the results. Complete a size record form, provide one copy to the Provider and retain one copy for FCDPS.

If performing multiple fit-tests, clean nebulizer at least every 4 hours and when all fit-tests are completed. Use warm soapy water to clean the nebulizer and all it's components. Rinse and allow them to air dry. Wipe the inside of the testing chamber with a disposable antiseptic pad as needed and when fit-tests are complete. Allow hood and nebulizers to dry thoroughly before storing.

All fit-testing must comply with the OSHA standard. The fit-test methods are outlined in Appendix A of 19 CFR 1910.134.

Appendix B: Quantitative Fit testing OHD Quantifit

Follow the manufacturer's instructions for the OHD Quantifit. Saccharin and Bitrex are not used so there is no sensitivity testing needed and no spraying of aerosol.

The education components and user seal check instructions remain the same.

The fit test exercises are the same except that there is an additional exercise requiring the provider to grimace (and release) for 15 seconds. The OHD Quantifit will prompt the instructor as each exercise is due and tracks the time.

The OHD Quantifit will record the data on a computer which can then produce written report forms for each provider.

Appendix C Respirator Training and Fit-Testing Record for Qualitative Fit Test

Appendix C: Respirator Training and Fit-Testing Record for Qualitative Fit Test

Section 1 – To be Completed by Provider

Provider Name	Title	Date

Training
I have received and understood training on each of the subjects checked below : Check

• Review of written Respiratory Protection Program	
• Description of the activities and circumstances for which respirator use is required	
• Importance of proper fit and the consequences of improper fit	
• Importance of proper use, storage, or inspection	
• Limitations of this type of respirator	
• Appropriate action if respirator becomes damaged, a leak is detected or breathing becomes difficult	
• Review of manufacturer instruction sheet on proper donning, performing user seal check, and removing respirator	
• How to store respirator and when to discard or reuse	

Use: The Provider will routinely perform at which level (select one)
Entry Firefighter _____ Non-Entry Firefighter, EMS, and other responders _____

Provider's Name **Signature** **Date**

Section 2 – To be completed by Fit-Tester

Check One: [ ] Initial fit-test [ ] Annual re-test	**Test solution** [ ] Saccharin [ ] Bitrex

[ ] Unable to complete test - list reason _____

[ ] Failed fit test – list type of respirator(s) tested

Manufacturer	Model Type	Size

[ ] Successfully completed fit test – list type of respirator(s) tested

Manufacturer	Model Type	Size

Fit Tester's Name **Signature** **Date**

Appendix D: SCBA Cleaning

Procedures for Cleaning Respirators

A. Remove filters, cartridges, or canisters. Disassemble facepiece by removing . speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.

B. Wash components in warm (110 ^{O}F) water with mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

C. Rinse components thoroughly in clean, warm (110 ^{O}F max.), preferably running water. Drain.

D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:

1. Hypochlorite solution (50 ppm of chlorine) made be adding approximately one milliliter of laundry bleach to one liter of water at 110 ^{O}F; or,
2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodine/100cc of 45% alcohol) to one liter of water at 110 ^{O}F; or,
3. Other commercially available cleaners of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

E. Rinse components thoroughly in clean, warm 1 IO ^{O}F (maximum), and preferably running water. Drain. The importance of through rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

F. Components should be hand-dried with a clean lint-free cloth or air-dried. G. Reassemble facepiece, replace filters, car-fridges, and canisters where necessary.

H. Test the respirator to ensure that all components work properly.

Appendix E: Air Compressor Sample Inspection Document

Air compressors that support refillable, wearable SCBA are used within FCDPS. The following Inspection guide will be implemented according to section 7. Records will be maintained with the RPA.

Measure	Response	Testing Notes
Type of Air Compressor (Non-Oil fitting v. Oil fitting)		
Fill Test for Carbon Monoxide levels in breathing air (record PPM)		Cannot exceed 10 PPM or failure
Compressor provides a protected environment, reasonable shielding from air contaminants		
Moisture content is minimized below ambient temperature		
In-Line air purifying sorbent beds and filters are in date and functional		
For Oil Only: In-Line air purifying filter functional and in date		
A tag is present with legible identifying information and associated filter change date(s)		
The Air Compressor is accounted for on the FCDPS Inventory system		
The Air compressor has been checked in the last 12 months (OR) was noted as out of service between the 12'th month and this exam		
A record of trained providers exists for this air compressor and is accessible		
A training document exists to ensure consistency in provider training and is accessible for this air compressor		

Appendix F: Respirator Selection Guidelines

Procedures for selecting respirators [29 CFR 1910.134 (c)((1)(i)]. These procedures are described in Section 4.0 of this program.

Task	Condition	Respirator
Incipient stage fire	Non-IDLH	SCBA at discretion of ICO
Interior structural firefighting, beyond incipient stage	IDLH	SCBA
Cutting vent	IDLH	SCBA
Ladder support	IDLH and non IDLH	SCBA for IDLH SCBA at discretion of ICO
Pump support	IDLH and Non-IDLH	SCBA for IDLH None, at discretion of ICO
Set hose	Non-IDLH	None
Car fire	IDLH	SCBA
Dumpster fire	IDLH	SCBA for IDLH or at discretion of ICO
Carbon Monoxide alarm	IDLH	SCBA until air monitoring shows levels below 35 ppm Carbon Monoxide
Ammonia refrigeration leak	IDLH	SCBA until air monitoring shows air levels below 15 ppm Ammonia
Fuel oil spill with fire	IDLH	SCBA
Fuel oil spill without fire	Non-IDLH	SCBA until air monitoring shows air level VOCs < 300 ppm
Outdoor Refuse or brush fire	Non IDLH, but Carcinogens in Smoke	SCBA for IDLH, P100 or None at discretion of ICO
Overhaul (interior)	Not IDLH, but Carcinogens in smoke	SCBA or P100, **until the carbon monoxide reading has been at 0 for sixty minutes.**
EMS with potential exposure to TB or other airborne infection	Not IDLH, but potential airborne hazard	N95 disposable
EMS medical response with potential splash with blood or vomit	Not IDLH, but potential airborne hazard	N95 disposable
Public Interaction – Unplanned, with potential for splash with blood or Vomit	Not IDLH, but potential airborne hazard	N95 Disposable, if close contact (under 6 feet for sustained periods) is expected, otherwise, Simple face covering or None at discretion of ICO
Public Interaction – Unplanned, with potential exposure to TB or other airborne infection	Not IDLH, but potential airborne hazard	N95 Disposable, if close contact (under 6 feet for sustained periods) is expected, otherwise, Simple face covering or None at discretion of ICO

The Franklin County Department of Public Safety respiratory protection plan follows the Occupational Safety and Health Administrations 1910 requirements and the National Fire Protection Associations 1500 standard on respiratory protection. All personnel, career and volunteer, shall complete annual training in SCBA confidence in accordance with the aforementioned standards and requirements.