FEMS Board – Executive Committee
Agenda – 6/6/2016

1. Call to Order
   a. From the Board: Agenda Additions
   b. From the Public: Matters Not Listed on the Agenda

2. Consent Agenda
   a. January Meeting minutes

3. Fire Rescue System Strategic Plan - update
   a. Plan progress –
      i. Pantops Update

4. Unfinished Business
   a. FEMSB Work Plan Items/Policy - for Decision/Action
      i. Next item for focus
   b. Volunteer Recruitment and Retention - update
      i. Hollymead, Ivy and Monticello Station Recruitment and Retention Plan –
   c. Temp OA’s Update

5. New Business
   a. July Meeting
   b. Respiratory Protection Policy
   c. Scottsville Rescue Update

6. Next Meeting
   a. Monday, July 4, 2016 1600hrs. ACFR Conference Room

7. Adjournment
A meeting of the Executive Committee of the Albemarle County Fire/EMS Board was held on Monday, May 2, 2016 at 1600 hours in the Fire Rescue Conference Room of the County Office Building, Stagecoach Road, Charlottesville.

The following members were in attendance:
Kostas Alibertis, Western Albemarle Rescue Squad
Dan Eggleston, Albemarle County Fire & Rescue
Preston Gentry, Crozet Volunteer Fire Department
Dayton Haugh, Charlottesville Area Rescue Squad
Danny Tawney, Seminole Trail Fire Department

Others in Attendance:
John Oprandy, Albemarle County Fire & Rescue
Tom LaBelle, Albemarle County Fire & Rescue

1. Call to Order
Chief Eggleston called the meeting to order at 1600 hours.

   a. From the Board: Agenda Additions
   Chief Eggleston mentioned that he had one brief item to add, but there were no other agenda additions.

b. From the Public: Matters Not Listed on the Agenda
   There were none presented.

2. Consent Agenda
   a. April meeting minutes

Chief Haugh commented that there were numerous places in the minutes that had “ABL,” when the text should have said “AVL.”

Chief LaBelle suggested approving the minutes with the provision that the minutes would be corrected to say “AVL” throughout.

**MOTION:** Chief Haugh moved to approve the Consent Agenda with the April 2016 Executive Committee meeting minutes as amended. Chief Gentry seconded the motion, which passed unanimously (4-0), with Chief Tawney abstaining because he was not present at the April EC meeting.
3. Fire Rescue System Strategic Plan - update

a. Plan progress
   i. Strategic Plan Development

Chief Eggleston reported that this item was on the agenda to see if there was any feedback from Tyler St. Clair’s presentation at the FEMS Board meeting. He stated that Ms. St. Clair had been very process focused, and what they got out of that meeting was that people wanted to see what was accomplished in the last plan, just as a starting point for the new process. Chief Eggleston said that he would send out Ms. St. Clair’s presentation, and Chief Alibertis suggested that it be posted online. Chief Eggleston stated that Ms. St. Clair wants to do the standards of cover first as a way of generating data, then doing the strategic planning.

Chief Alibertis suggested that Chief Eggleston provide an update on the standards of cover item.

Chief Eggleston explained that Chief Alibertis and Chief Stephens would be joining the group to evaluate the vendors for the standards of cover, and there are two vendors – one who was new to him, and Fitch & Associates, which is a fairly large consulting firm. Chief Eggleston stated that Fitch’s reference material was so comprehensive that he needed to go back through it to pull out the specific standards of cover information. He said that this process will gather a lot of data that could help with strategic planning, which was why Ms. St. Clair wanted to wait until the majority of the standards of cover item was done.

Chief Alibertis commented that he felt the Fitch proposal was overkill, with almost too much information provided.

Chief Eggleston responded that he thought the firm was trying to convey that they have a lot of experience on their staff.

4. Unfinished Business

a. FEMSB Work Plan Items/Policy - for Decision/Action
   i. Next item for focus

Chief LaBelle stated that the policies directed to committees and staff had been moved forward, and asked EC members if there were other items that should be worked on from an organizational structure standpoint, with the bylaws done and policies currently being addressed.

Chief Alibertis noted that the building inspections were coming up the following week.

Chief LaBelle stated that those would begin the following week and had sent an email out, but the only station that had responded back to him directly was Seminole Trail, so he would need to do a follow-up message. He stated that no one necessarily needed to be present at the station for the inspection as long as someone can get access to it.
Chief LaBelle said that the goal of these assessments was for stations to be able to plan for their own budgetary purposes, but stations would also be contacted in the event of immediate problems that needed attention.

Chief Eggleston said that Station 2 had already started with their inspection since they have an existing roof issue.

Chief LaBelle responded that they have already begun to address that issue but still would have an inspection done, and the goal of the assessments was to support the planning process and inform the five-year plan so there are no surprises.

Chief Tawney asked if the reports would be back in time for budgeting later this year.

Chief Oprandy responded that the information would be back in advance of the CIP process, and there would be time to work through the questions regarding who would be responsible for the maintenance and whether a station could accomplish it or whether it needed to be submitted to the CIP.

Chief Alibertis asked if those dates needed to be confirmed with Chief LaBelle.

Chief LaBelle responded that they just needed to let him know if those dates worked.

Chief Eggleston commented that Chief Tawney’s point is well taken, as they often find themselves in a situation where they have very little time to put all the information together for a building issue in order to submit it to the CIP, and the building inspection approach will give them a good priority list that can more easily translate into a budget time.

Chief LaBelle stated that in his email, he encouraged stations to have someone from their building and grounds committee or so forth to be present for the inspection, so they would have some context when the report came back.

Chief Tawney said that his station has some issues, but nothing that rises to that level.

Chief Oprandy stated that with past when working through the funding arrangements, the process was very specific in saying that departments would be responsible for taking care of their building, because many of the departments said they needed to have some responsibilities to raise funds as an important part of volunteer agencies. He said that whether that is where stations are now – and whether the assessment would be used as a fundraising platform for a fund drive for something like a new roof – is uncertain.

Chief Tawney emphasized that if they were fully operationally funded, that would be one thing – but the money stations raise pays bills and repairs apparatus, and there is nothing left for a capital fund. He said that his station has already spent every dime they raised this year in fundraising to keep their trucks running, and even that has been
a challenge. Chief Tawney stated that there would be a point at which departments could no longer do that and would have to look to the County for things like a new roof, although none of that could happen without documentation, so the assessment was step one. He commented that the cost now to paint the Seminole Trail building would be significant, and those are the types of things for they could use help from the County.

b. Volunteer Recruitment and Retention - update
   i. Hollymead, Ivy and Monticello Station Recruitment and Retention Plan
Chief LaBelle reported that one of the volunteers from the Ivy station had been accepted at Stanford as a resident, which left 11 volunteers, so they were getting ready to do some outreach to try to drive those numbers up in time for the fall Firefighter I course. He stated that Hollymead and Monticello were doing fairly well in terms of recruitment.

Chief LaBelle reported that a post-certification release academy had recently been started for ACFR volunteers through the training division, with the idea of having members come in and work on skills over and over, so they could go back to their respective stations with a strong base level of skills. Chief LaBelle reported that the Recruitment and Retention Committee would be meeting the following night, with a focus on a strategic plan for more systemic recruitment and retention effort. He said that in the past, Jason Amman went out and did a station-by-station review of plans and projects.

Chief LaBelle also mentioned that the recruitment and retention survey deadline was closing the following week, and stated that there had been 289 respondents – and the committee waited to put the survey out to Hollymead, Ivy and Monticello so the numbers there would not skew the data.

Chief Eggleston stated that the most important part of the survey process is that it puts forth some ideas for benefits, so members can weigh in directly on what they value. He said that this would be something they could put forth to the Board of Supervisors, as they had been interested in it for quite some time, with this survey offering almost 300 responses to provide justification as to what members feel would make a big difference in terms of retention.

Chief LaBelle noted that respondents had to rank “1-3” or “not applicable,” and the service award was chosen first by 50.6% of respondents; health insurance had 24.6%; and tuition reimbursement was 23%.

Chief Eggleston said that the service award was something that VFIS offered.

Chief LaBelle stated that it was, and other organizations offered similar items ranging from very simple to more complex. He said that when a representative came into the Recruitment & Retention Committee meeting and the FEMS Board, they talked about the difference between a defined benefit program and a defined contribution. Chief LaBelle stated that while a defined benefit program is nice conceptually, it is hard to
manage consistently because of market fluctuations – which would probably scare off the Board of Supervisors. He said that even with a defined benefit plan, the format from VFIS for other places awarded points for different levels of participation, years of service, etc., and the point ratio would be broken down by whatever the Board set aside. Chief LaBelle stated that VFIS went through Fire RMS and figured out annual contributions and returns, and found that someone five years away from entitlement age would receive about $100 per month, whereas someone entering the system now would make about $400 per month, using a 5% annual growth rate – which he felt was a bit aggressive.

5. New Business
Chief Eggleston reported that Rita Krenz from Scottsville had reached out to Chief LaBelle and had been working with him, Chief Lambert, and Chief Puckett on precepting some training – because Scottsville had an influx of new members but had no way to train them up and release them. He said that ACFR was going to meet with Scottsville and better assess their staffing shortage and challenges, with some of the longer-term members there having resigned, and they may need some help until those members are released.

Chief Alibertis asked if Rita was the captain there.

Chief Eggleston responded that she was the president of the department, but was trying to work both the administrative and officer sides because of the staffing shortage. He said that ACFR was going to meet with her this week to try to help her get a handle on it.

Chief Tawney asked if Scottsville needed a place to send some of the new EMTs just to collect calls.

Chief LaBelle responded that he has offered that and they were doing it to some extent, with 11 and Rescue 8 and others offered.

Chief Eggleston stated that they want it done in Scottsville, but the call volume isn’t sufficient to release anyone.

Chief Tawney commented that they needed to get on board with the idea of going other places to get the calls under their belt, because you could work two shifts there and not get a call.

Chief Eggleston said that the other factor was that the EMTs there were with patients for a long time, and needed to be really good as they were going to be with those patients for a while up Route 20. He added that he would not be surprised to come back and ask other stations to help out, at least in the short term.
Chief Gentry reported that he would be stepping done from chief of his station, with Mike Boyle running for chief, and said that he could be an assistant chief. Chief Gentry asked if he could still serve on the Executive Committee.

Chief Eggleston responded that he did not think an EC representative had to be a standing chief, but he would check the bylaws.

Chief Oprandy stated that this was an important point, with three EC members getting ready to step down.

Chief Eggleston congratulated pending retirees.

6. Next Meeting
a. Monday, June 6, 2016, 1600hrs. ACFR Conference Room

7. Adjournment

The chiefs adjourned their meeting at 1630 hours.
**STANDARD ADMINISTRATIVE POLICY**

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<th>Subject:</th>
<th>Respiratory Protection</th>
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<tr>
<td>Reference Number:</td>
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<td>Effective Date:</td>
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<td>Last Revision Date:</td>
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<td>Signature of Approval:</td>
<td>J. Dan Eggleston, Chief</td>
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**Purpose:**
The purpose of this policy is to outline parameters of respiratory protection for the fire and rescue services within Albemarle County. This policy shall reduce the risk of injury and illness to Fire and Rescue personnel while they are working in atmospheres that are immediately dangerous to life and health, hazardous, and/or toxic.

**Scope:**
This Standard Administrative Policy shall be applicable to all personnel operating within the Albemarle County coordinated and integrated fire and emergency medical service system as defined in Albemarle County Code Chapter 6, Article I, Division I, Section 6-100.

**Background:**
This Standard Administrative Policy shall fulfill the requirements established by OSHA 29 CFR 1910.134, Respiratory Protection Standard, as amended, issued by the United States Department of Labor, Occupational Safety and Health Administration, for implementation by all current and future personnel operating within the Albemarle County coordinated and integrated fire and emergency medical service system.

This policy replaces and supersedes the following policies:
- SOG-OPS-024 Use of an SCBA with Facial Hair; Annual Fit Testing
- SOG-OPS-010 Two-In / Two-Out (RIT)
- SOG-OPS-022 SCBA Usage and Atmospheric Monitoring

**Definitions:**

- **Agency:** The fire department or rescue squad in which the member is affiliated. The system as a whole is referred to as Albemarle County Fire Rescue (ACFR) or the County.

- **Air-Purifying Respirator (APR):** A respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air purifying element. In Albemarle County, the standard issued APR is the MSA Advantage LS utilizing the P-100 cartridge or specifically designated cartridge.

- **Annual:** For this policy, annual refers to the Fiscal Year which runs from July 1 – June 30.

- **Assigned Protection Factor (APF):** The workplace level of respiratory protection that a respirator or class of respirators is expected to provide to employees when the employer implements a continuing, effective respiratory protection program.

- **Atmosphere-Supplying 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.
Carbon Monoxide (CO) Monitoring: Monitoring of atmospheric concentrations of carbon monoxide (CO). SCBA use during overhaul operations shall not rely solely on the monitoring of CO levels as an indicator of safety.

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.

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 substantial release of an airborne contaminant.

Emergency Use Situations: Predetermined situations to be of severe hazards that shall require all participants to wear and use self-contained breathing apparatus (SCBA). Emergency use shall encompass all identified Immediately Dangerous to Life and Health (IDLH) situations or potential situations.

Employee Exposure: Exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

Employee / Personnel / Member: Unless specifically identified, the terms “employee”, “personnel”, or “member” refers to both career and volunteer members of the Albemarle County coordinated and integrated fire and emergency medical service system.

End-of-Service-Life Indicator (ESLI): A system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.

Escape-Only Respirator: A respirator intended to be used only for emergency exit.

Filter or Air Purifying Element: A component used in respirators to remove solid or liquid aerosols from the inspired air.

Filtering Facepiece (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. The only accepted protocol in Albemarle County is the quantitative fit test.

Fit Test Administrator: A trained / qualified individual per manufacturer standards who has the responsibility of performing fit tests to members. There shall be a minimum of one fit test administrator associated with each agency.

High Efficiency Particulate Air (HEPA): 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 N100, R100, and P100 filters.

Immediately Dangerous to Life and 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.

Maximum Use Concentration (MUC): The maximum atmospheric concentration of a hazardous substance from which an employee can be expected to be protected when wearing a respirator, and is determined by the assigned protection factor of the respirator or class of respirators and the exposure limit of the hazardous substance. The MUC can be determined mathematically by multiplying the assigned protection factor specified for a respirator by the required OSHA permissible exposure limit, short-term exposure limit, or ceiling limit. When no OSHA exposure limit is available for a hazardous substance, an employer must determine a MUC on the basis of relevant available information and informed professional judgement.

Medical Evaluation: A medical examination and / or a questionnaire that is used on an annual basis to medically determine the member’s ability to participate in a respiratory protection program per NFPA 1582, Standard on Comprehensive Occupational Medical Program for Fire Departments.
Negative Pressure Respirator (tight fitting): 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-Emergency Use Situations: Predetermined situation not to be of a severe hazard that participants may choose the opportunity to increase their respiratory protection or may be ordered by the officer-in-charge (OIC).

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 of the health care services required within this policy. Dr. Talbot is the contracted physician for the ACFR.

Positive Pressure Respirator: A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

Program Manager: There shall be one program manager from each member agency selected by the chief or his / her designee. They shall be responsible for the implementation of and compliance with the Respiratory Protection Policy within their agency. Further, they shall liaise with the Respiratory Protection Program Administrator to ensure compliance.

Qualitative Fit Test (QLFT): A pass / fail fit test to assess the adequacy of 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. This is the only accepted fit test procedure method for the ACFR.

Respiratory Protection Program Administrator: A career officer selected by the Chief of the Department or his / her designee that is responsible for the full implementation of and compliance with the Respiratory Protection Policy for ACFR, to be inclusive of all personnel operating within the Albemarle County coordinated and integrated fire and emergency medical service system.

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 respiratory equipment provides adequate protection to the wearer.

Supplied Air: Air used to fill respirators that must meet a minimum of NFPA grade D air quality requirements.

Supplied Air Breathing Apparatus (SABA): An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

Tight-Fitting Facepiece: A respiratory inlet covering that forms a complete seal with the face.

User Seal Check: An action conducted by the respirator user to determine if the respirator is properly seated to the face.

Applicable Standards:
- OSHA 29 CFR 1910.134
- NFPA 1404, Standards for Fire Service Respiratory Protection Training
- NFPA 1500, Standard on Fire Department Occupational Safety and Health Program
- NFPA 1852, Standard on Selection, Care, and Maintenance of Open-Circuit SCBA
- NFPA 1981, Standard on Open-Circuit SCBA for Emergency Services
- NFPA 1982, Standard on Personal Alert Safety Systems
- NFPA 1984, Standard on Respirators for Wildland Firefighting Operations
- NFPA 1989 Standard on Breathing Air Quality for Emergency Services Respiratory Protection
Policy:

1. **Medical Evaluations**

   1.1. All members shall complete an annual OSHA Respirator Medical Evaluation Questionnaire (Attachment A) or a medical examination that obtains the same information as the medical questionnaire in accordance with OSHA 29 CFR 1910.134.

   1.2. If a questionnaire is utilized in lieu of a medical examination the following process will be utilized:

      1.2.1. The member’s agency shall ensure that each member qualified to wear a respirator completes a questionnaire and forwards it to the department physician annually. This will normally be in conjunction with annual fit testing.

      1.2.2. The member’s agency shall ensure a member completes the necessary follow up if their initial medical questionnaire review demonstrates the need for additional medical review or examination by the department physician.

      1.2.3. Conditions that may require additional medical review or examination may include, but is not limited to the following:

         1.2.3.1. Age > 50
         1.2.3.2. COPD / Asthma
         1.2.3.3. Cardiac Disease
         1.2.3.4. Hypertension
         1.2.3.5. Diabetic
         1.2.3.6. Sleep Apnea
         1.2.3.7. BMI > 40

   1.3. Any member not receiving an annual OSHA Medical Evaluation Questionnaire shall be deemed unfit to participate in emergency and/or training activities that may involve IDLH atmospheres.

   1.4. The department physician will provide a written recommendation regarding the member’s ability to use the respirator (Attachment B). This record shall be maintained according to Table 4.

2. **Fit Testing**

   2.1. All fit testing shall be in accordance with the QNFT fit test protocol contained in OSHA 29 CFR 1910.134.

   2.1.1. Type of Fit Testing

      2.1.1.1. The ACFR employs the use of a TSI Porta Count Pro 8038 QNFT fit test machine to deliver measurable results and prove the appropriately sized mask is being used by the member. The machine used by ACFR allows for a set minimum fit factor. All tests completed for a full-face respirator shall require a fit factor of 500 or greater. Half-face respirators may require a fit factor of 100-500 and some particulate masks may require a fit factor of 100 or less.

      2.1.2. 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 which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.

      2.1.3. An additional fit test shall be required and must be passed whenever a member, supervisor, program manager, or respiratory protection program administrator reports or makes visual observations of changes in the member’s physical condition that could affect respirator fit. Such conditions include, but are not limited to, improper facial hair, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

      2.1.4. Fit testing of new members will be done upon entrance into an approved fire rescue academy. New members who are already certified will be fit tested by CARE technicians at the SCBA repair shop.
2.1.4.1.1. Upon completion of the fit test and having completed the required medical questionnaire and / or medical evaluation the new member will be issued the appropriately sized respirator (SCBA face piece). A record of the fit test shall be maintained according to this policy.

2.1.4.2. Annual fit testing for current members will be performed by their appropriate fit test administrator or by a CARE technician at the SCBA repair shop. A QNFT fit test machine will be made available throughout the year to each station to perform fit testing for all qualified members.

2.1.5. Fit test records shall be maintained by the Respiratory Protection Program Administrator on a dedicated computer utilizing the TSI Porta Count software. Test records obtained outside of the SCBA shop will be stored locally on a USB storage device. The USB storage device shall be submitted to the SCBA shop for download after each member department has performed their annual fit testing. These records shall be maintained, at a minimum, for a one-year period following the test.

3. Training

3.1. Initial Training

3.1.1. All members that are required to use respiratory protection shall be properly trained and annually retrained in its use prior to using any respirator. Initial training shall be primarily accomplished through a Virginia State Fire Fighter I program, local Fire Academy, ACFR Infection Control class or agency adopted equivalent, or via some other training that is deemed equivalent by the Chief of the Department.

3.1.2. All members required to use the APR and cartridges, SABA, or SCBA will be trained in all of the following and any special uses, limitations, etc., according to the manufacturer’s direction.

3.1.2.1. Proper selection and use based on:

3.1.2.1.1. The expected hazards.
3.1.2.1.2. The potential hazards.
3.1.2.1.3. The capabilities of the respirator.
3.1.2.1.4. The limitations of the respirator.

3.1.2.2. Proper fit.

3.1.2.3. Maintenance procedures.

3.1.2.4. Daily checks.

3.1.2.5. How to recognize medical signs and symptoms that limit or prevent effective respirator use.

3.1.3. Emphasis will be placed on practical skills such as:

3.1.3.1. Donning and doffing techniques.

3.1.3.2. Care and cleaning of the respirator.

3.1.3.3. Maintenance, storage, and replacement of respirators.

3.1.3.4. Emergency procedures.

3.2. Annual Retraining

3.2.1. Annual retraining will be properly documented and will include the type(s) and model(s) of respirator for which the individual has been trained and fit tested. Records of the documented annual retraining shall be maintained within the county’s Record Management System (RMS).
3.2.2. Annual retraining shall be in accordance with OSHA 29 CFR 1910.134 (k) (1). The member shall demonstrate knowledge of all the items listed in Attachment C.

3.2.2.1. If the type of respirator used in a work assignment is changed, all previous training will be rendered obsolete and training on the new equipment will be mandatory. Chief Officers and / or their designee(s) will be responsible for annual retraining and training for upgrade changes. The Respiratory Protection Program Administrator will coordinate training for system changes.

4. Issuance

4.1. The following criteria must be met prior to the issuance or use of respiratory protection equipment:

4.1.1. Member in good standing with an affiliated agency
4.1.2. Completion of an annual OSHA Respiratory Medical Evaluation Questionnaire (Attachment A) or a medical examination that obtains the same information as the medical questionnaire in accordance with OSHA 29 CFR 1910.134
4.1.3. Completion of an annual Fit Test
4.1.4. Active enrollment in an ACFR Fire Academy or
4.1.5. Certified to participate in IDLH incidents through VDFP certification of at least Virginia Fire Attack (NFPA 1403)
   4.1.5.1. Members who have joined an agency since 2006 are held to the NFPA 1403 standard. Those who were members prior to 2006 qualify through agency training.
4.1.6. Submit a Compliance Form (Attachment D) signed by their agency Chief to the Respiratory Protection Administrator

4.2. Upon submission of a signed Compliance Form the member shall be issued, or have made available, one or more of the following types of respiratory protection as deemed necessary by the County and / or the member’s agency based on the mode in which it is performing:

4.2.1. APR and Cartridge
4.2.2. SCBA and Face Piece
4.2.3. SABA
4.2.4. N95

4.3. Upon separation of employment or membership with the County or an affiliated agency, the separating employee is required to return all issued respiratory protection equipment. The equipment shall be returned to their respective chief or his / her designee. The equipment shall then be returned to the SCBA shop for testing and storage. Additionally, if an employee fails to maintain the requirements listed in section 4.1 of this policy they shall surrender all assigned respiratory equipment the same as during separation of employment or membership.

4.4. The County shall be responsible for all costs associated with procuring and maintaining respiratory protection equipment covered in this policy. Individual agencies and / or members shall be responsible for all costs associated with procuring and maintaining respiratory protection equipment that is outside of this policy (voluntary use equipment, equipment not listed, or purchases that go beyond the standard allotment).

5. Care and Maintenance

5.1. All respirators shall be maintained by appropriate contractors or certified team members (CARE Technicians) in a certified repair shop as required by OSHA 29 CFR 1910.134 and the manufacturer. Fire and Safety Equipment Company is the outside contractor of record for Albemarle County. The only other approved SCBA repair facility is the ACFR SCBA Shop located at Monticello Fire Station 11. Records will be maintained according to Table 4 and will be stored within the department’s Record Management System (RMS) and, where applicable, the maintenance and repair software utilized by the ACFR SCBA Shop.

5.2. The maintenance of respiratory protective devices involves a thorough visual inspection for cleanliness and defects. Worn or deteriorated parts shall be replaced. No attempt shall be made to replace components, make adjustments, or make repairs on any respirator beyond those recommended by the manufacturer. End user maintenance is limited to routine
cleaning and changing of the battery pack. Maintenance and repairs beyond routine cleaning and changing of the battery pack shall only be performed by certified CARE technicians in a certified SCBA repair shop.

5.2.1. Cartridge and Air Purifying Respirator (APR)

5.2.1.1. Generally, the APR masks are reusable. Devices issued to or used by team members will be kept in a clean, resealable bag or other container when not in use.

5.2.1.2. Generally, the cartridges are disposable/reusable. Cartridges may continue to be reused as long as they are clean, operable, and within service life. Cartridges will be disposed of when grossly contaminated by blood or other body fluids, when their appearance becomes unsightly due to dirt or other material, if they are saturated with particulate, aerosol, or oil, if they are damaged so as to compromise a seal, or when resistance to respiration becomes noticeable or uncomfortable. This also includes following any guidance by the manufacturer (strictly following the cartridge service life guidelines).

5.2.2. SCBA Harness Assembly

5.2.2.1. All maintenance, alterations and repairs on a SCBA harness assembly shall be conducted in accordance with the manufacturer’s instructions by a SCBA-certified maintenance member (CARE Technician). This certification record will be maintained in accordance with Table 4. Personnel shall clean and sanitize the harness after each use upon their return to an appropriate facility. Only warm water and a mild soap solution with a sponge or soft/medium bristle brush should be utilized to clean the harness, straps, and components. Care should be maintained to keep water, dirt, and debris out of the second stage regulator opening by covering the outlet.

5.2.3. SCBA Face Piece

5.2.3.1. All maintenance, alterations and repairs on a SCBA face piece shall be conducted in accordance with the manufacturer’s instructions by a SCBA-certified maintenance member (CARE Technician). This certification record will be maintained in accordance with Table 4. Personnel shall clean and sanitize the face piece after each use upon their return to an appropriate facility. Only warm water, an approved solution of MSA Confidence Plus disinfectant cleaner and warm water followed by rinsing in clean warm water or the use of a MSA disinfectant wiping cloth are the approved methods of cleaning and disinfecting SCBA face pieces.

5.2.4. N95 Filter Mask

5.2.4.1. Generally, these are disposable. Devices shall be kept on apparatus in a location that maintains their shape and cleanliness. These devices shall be disposed of when they become grossly contaminated by blood or other body fluids, when their appearance becomes unsightly due to dirt or other material, if they are damaged so as to compromise a seal, or when resistance to respiration becomes noticeable or uncomfortable. This also includes following any guidance by the manufacturer.

5.2.5. SCBA Cylinder

5.2.5.1. All maintenance and repairs on SCBA cylinders shall be conducted in accordance with the manufacturer’s instructions by a SCBA-certified maintenance member (CARE Technician). This certification record will be maintained in accordance with Table 4. Personnel shall clean and sanitize the cylinder after each use upon their return to an appropriate facility. Only warm water and a mild soap solution with a sponge or soft/medium bristle brush should be utilized to clean the cylinder and components.

5.2.5.2. Prior to recharging a spent cylinder, the cylinder shall be inspected for heat damage, damage from corrosion, or other significant damage. The cylinder hydro test date shall be inspected to be sure that the cylinder is in date. To recharge the spent cylinder, the cylinder shall be placed inside of an approved containment unit and recharged at a reasonable rate to minimize heat buildup. The cylinder should then be allowed to cool to room temperature and topped off as needed to maintain 4500 psi at 70°F. In general, the stationary compressor/fill stations will auto-fill and auto-cascade cylinders and maintain an appropriate rate of fill.
5.3. All respirators shall be cleaned in accordance with OSHA 29 CFR 1910.134, Appendix B-2, or as recommended by the manufacturer. At a minimum, the user shall accomplish the following:

5.3.1. Respirators issued for the exclusive use of a member shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.

5.3.2. Respirators stowed on apparatus shall be cleaned and disinfected after each use.

5.3.3. Respirators being used for fit testing and training shall be cleaned and disinfected after each use.

5.4. All apparatus-assigned respirators / SCBA on apparatus that personnel will be responding on, shall be inspected on a daily basis, or before each use. The inspection shall be based on Table 1 and shall be documented on the Apparatus Check Sheet (Attachment E) or a comparable form as determined by the individual agency, according to the recommendations of the manufacturer or according to OSHA 29 CFR 1910.134. All SABA systems shall be inspected on a weekly and prior-to-use basis. All inspections shall be documented on the Apparatus Check Sheet (Attachment D). All respirators shall be inspected during cleaning.

<table>
<thead>
<tr>
<th>TABLE 1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Harness Assembly</td>
</tr>
<tr>
<td>Straps &amp; Buckles</td>
</tr>
<tr>
<td>Back Plate &amp; Cylinder Lock</td>
</tr>
<tr>
<td>Cylinder Pressure Gauge</td>
</tr>
<tr>
<td>Cylinder Pressure (4500)</td>
</tr>
<tr>
<td>Hydro in Date</td>
</tr>
<tr>
<td>MMR Inspection &amp; Function</td>
</tr>
<tr>
<td>All Hoses</td>
</tr>
<tr>
<td>By-Pass Valve</td>
</tr>
<tr>
<td>ICM / PASS</td>
</tr>
<tr>
<td>Battery</td>
</tr>
<tr>
<td>Body</td>
</tr>
<tr>
<td>Harness</td>
</tr>
<tr>
<td>Lens</td>
</tr>
<tr>
<td>Exhalation Valve</td>
</tr>
<tr>
<td>Monthly and After Each Use</td>
</tr>
<tr>
<td>Cylinder Pressure</td>
</tr>
<tr>
<td>Cylinder Change</td>
</tr>
<tr>
<td>Entire Apparatus OK</td>
</tr>
<tr>
<td>Cleaned &amp; Sanitized</td>
</tr>
</tbody>
</table>

5.5. All cylinders shall be hydrostatic tested as described by the manufacturer and the U.S. Department of Transportation (U.S. DOT).

5.5.1. All failed cylinders or end-of-life cylinders shall be made unusable and discarded or recycled.

5.5.2. Any cylinder found to be out of hydro-test date shall be placed out of service and the Respiratory Protection Program Administrator made aware of its location so it can be replaced and tested.

5.5.3. Any cylinder found to show evidence of exposure to high heat or flame, e.g., paint turned to a brown or black color, decals charred or missing, gauge lens melted, or elastomeric materials distorted, shall be removed from service and hydrostatic tested prior to recharging.

5.5.4. Recharging of cylinders shall be performed by trained members and in accordance with the guidelines and recommendations of the compressor manufacturer.

5.6. All respirators / SCBA, whether personally issued or assigned to apparatus, shall be stored in such a way as to maintain cleanliness and to keep damage to a minimum. Generally, this shall be accomplished by always utilizing respirator storage bag when not in use.

5.7. Flow Testing
5.7.1. All apparatus shall be flow tested annually or as needed due to maintenance. Flow testing shall be performed by certified CARE Technicians. The flow test shall be performed to meet all standards defined in NFPA 1852. Records of the tests shall be maintained with the flow test software.

5.8. Member LODD and / or Injury

5.8.1. An SCBA used by any member who suffers respiratory injuries, burn injuries, or line of duty death must be impounded by the Incident Commander. A report shall be attached to the SCBA unit (including breathing apparatus, all attachments, and face piece) that must include the name of the user, the date and location of the incident, a description of the problem, and all personnel that handled the SCBA following the injury. The fire marshal shall take possession of the SCBA unit and all appropriate documentation.

6. Respirator Selection and Use

6.1. Respirators selected for purchase shall be approved by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH) under the provisions of 42 CFR Part 84. Additionally, all selected respirators shall meet all applicable National Fire Protection Association (NFPA) standards at the time of purchase.

6.2. Only respiratory protection equipment approved by the Chief of the Department or their designee shall be authorized for use by system members. See Table 2 below.

<table>
<thead>
<tr>
<th>TABLE 2</th>
<th></th>
<th></th>
<th></th>
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</tr>
</thead>
<tbody>
<tr>
<td>APPROVED RESPIRATORS</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>MSA G1 SCBA</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>MSA G1 APR</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>MSA G1 PremAire® Cadet Escape Respirator</td>
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<td></td>
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<tr>
<td>MSA Advantage®</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Moldex 1511 N95</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Moldex 1512 N95</td>
<td></td>
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<td></td>
<td></td>
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<tr>
<td>Moldex 1513 N95</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.3. Prior to the use of a respirator:

6.3.1. There shall be no hair growth between the skin and the sealing surface of the respirator facepiece.

6.3.2. Personnel shall perform a negative pressure fit test per manufacturer recommendations.

6.4. Required Use

6.4.1. Hazardous Environments – IDLH

6.4.1.1. Respiratory protection shall be provided through the use of a Self Contained Breathing Apparatus (SCBA) or Supplied Air Breathing Apparatus (SABA), which shall be donned and utilized for atmospheres that are known to be Immediately Dangerous to Life and Health (IDLH). Further, if there is any doubt whether an environment is an IDLH, personnel shall don SCBA until the hazards or contaminants are identified and / or no longer exist. Table 3 lists the majority of IDLH environments and call types where SABA or SCBA are required.

<table>
<thead>
<tr>
<th>TABLE 3</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>HAZARDOUS ENVIRONMENTS – IDLH (NON-INCLUSIVE LIST)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structure Fires</td>
<td>H2S &gt;10ppm</td>
<td>CO &gt;35ppm</td>
<td>Aircraft Incidents</td>
<td>Confined Space Entry</td>
</tr>
<tr>
<td>Vehicle Fires</td>
<td>Gas Leaks</td>
<td>O2 &lt;19.5%</td>
<td>Rail Incidents</td>
<td>As deemed necessary by IC</td>
</tr>
<tr>
<td>Trash Fires</td>
<td>Salvage and Overhaul</td>
<td>O2 &gt;23.5%</td>
<td>Marine Incidents</td>
<td></td>
</tr>
<tr>
<td>Dumpster Fires</td>
<td>Building Collapse</td>
<td>HCN &gt;4.7ppm</td>
<td>Fire Investigations</td>
<td></td>
</tr>
</tbody>
</table>
6.4.1.2. Several studies have indicated that post fire incidents still present significant respiratory hazards due to known carcinogens. These carcinogens include nitrogen dioxide, acrolein, carbon monoxide, arsenic, mercury, hydrogen chloride, benzene, formaldehyde, glutaraldehyde, hydrogen cyanide, ozone, and particulate matter (otherwise undifferentiated matter less than 10µm diameter). These carcinogens can impact overhauling and fire investigation even when O\textsubscript{2} and CO levels have been deemed acceptable. Ventilation alone does not alleviate these hazards due to continued off-gassing while products cool. Only time has been proven to eliminate the hazard; however, the amount of time required to eliminate the threat depends on multiple factors (burn time, fuel type, fire size, etc.). Every effort should be made to properly monitor for these chemicals in post fire incidents to determine the level of respiratory protection required. In instances where the atmosphere cannot be determined to be safe all personnel shall wear SCBA during the overhaul and investigative phases of fire ground operations. If the atmosphere is determined to be safe from chemical threat personnel may utilize APR respirators with a P100 filter to protect against hazardous aerosolized dust.

6.4.1.3. Interior structural firefighting is inherently dangerous and in an effort to increase the safety factor during these incidents personnel shall enter in at least teams of two. These personnel shall remain in visual or voice contact at all times. Additionally, at least two personnel shall be located outside of the IDLH. All of these personnel shall have donned SCBA. Only one of the two personnel located outside of the IDLH may be assigned an additional role so long as this person is able to perform assistance or rescue activities without jeopardizing the safety or health of any firefighter working at the incident. No portion of this policy is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.

6.4.2. Hazardous Environments – Hazmat

6.4.2.1. Personnel shall don and utilize approved SCBA for Hazmat operations, to include decontamination. If the hazard cannot be identified and / or measured, or an IDLH atmosphere exists, SCBA shall be utilized.

6.4.2.2. If the hazard can be identified and / or measured, and the atmospheric oxygen level is above 19.5 percent, the APR with the appropriate cartridges may be used.

6.4.2.3. The Incident Commander or the assigned Safety Officer shall determine when the removal of breathing apparatus is permissible.

6.4.3. Hazardous Environments – TB / Airborne Infectious Diseases

6.4.3.1. Approved N95 respirators shall be donned and utilized to provide respiratory protection for members against the transmission of the tuberculosis droplet nuclei and other airborne infectious diseases.

6.4.3.2. Approved N95 respirators shall be donned and utilized to provide respiratory protection for members during certain medical procedures such as intubation procedures, suctioning procedures, and other emergency medical procedures as indicated in the member’s approved Infection Control Policy / Plan.

6.4.4. Hazardous Environments – Non-IDLH (FM, HTR, Training)

6.4.4.1. Approved APR respirators shall be donned and utilized to provide respiratory protection for members during origin and cause investigation when there is the potential for dust, asbestos, toxic byproducts, and / or anytime suspended particulates are present.

6.4.4.2. Approved APR respirators shall be donned and utilized to provide respiratory protection for members during HTR activities when there is the potential for dust, asbestos, toxic byproducts, and / or anytime suspended particulates are present.

6.4.4.3. Approved APR respirators shall be donned and utilized to provide respiratory protection for members during training, maintenance, or activity in the burn building that causes particulate matter to become airborne and easily inhaled such as cleaning up after live burns.
6.5. Non-Required Use

6.5.1. There may be situations where use of a respirator could provide an additional level of comfort and / or protection for personnel. Situations that may fall into this category and that may be required by the product manufacturer or OSHA 29 CFR 1910.134 include, but are not limited to, chemicals, use of solvents, woodcutting with power saws, use of abrasive blades with power saws, spray painting, grass cutting, and body recovery.

6.5.1.1. Each agency must determine any permissible voluntary respirator use and either provide or allow personnel to use their own respirator as long as the user does the following:

6.5.1.1.1. Read and follow all manufacturer instructions regarding the use and care of the respirator; and
6.5.1.1.2. Choose an appropriate respirator for the situation; and
6.5.1.1.3. Insure NIOSH-approved respirator for the application; and
6.5.1.1.4. Use the respirator that has been assigned to him/her.

6.6. Air Management

6.6.1. All personnel who may use an SCBA while operating within an IDLH atmosphere shall practice sound air management. Personnel shall utilize Rule of Air Management (ROAM).

6.6.1.1. ROAM

6.6.1.1.1. All members utilizing an SCBA in the IDLH of an incident shall monitor the amount of air in their SCBA cylinder as well as their rate of air consumption in order to exit the IDLH prior to the activation of their low air alarm.

6.6.1.1.2. The low air alarm will activate at 33% of air supply. This air supply is the emergency reserve and shall only be utilized in the event an emergency occurs while exiting such as becoming lost, trapped, or entangled.

6.6.1.1.3. The Company Officer / Team Leader shall frequently assess their crew’s air consumption rates and decide the crew’s exit time based on the individual with the greatest assumed air consumption rate. It is the individual team member’s responsibility to continually assess and report his / her air consumption to his / her Company Officer / Team Leader.

6.6.2. Strategic Air Management

6.6.2.1. The Incident Commander (IC) shall consider air management as a critical fire-ground factor when evaluating the risk management profile of a building, performing size-up, and determining strategy. The IC shall request “air status” during any PAR check. Command will assist companies in air management by:

6.6.2.1.1. Controlling position and function of crews within the IDLH
6.6.2.1.2. Maintaining an awareness of how long crews have been working (elapsed time notifications)
6.6.2.1.3. Insuring adequate resources are on scene to maintain a tactical reserve
6.6.2.1.4. Assigning companies to multiple points of egress
6.6.2.1.5. Relieving and rotating operating crews as needed

6.6.3. Tactical Level Air Management

6.6.3.1. Accountability of members operating within the IDLH
6.6.3.2. Tracking operating crews time on air
6.6.3.3. Managing rotation of crews and providing relief through reassignment or rehab
6.6.3.4. Providing command with a frequent PAR

6.6.4. Task Level Air Management
6.6.4.1. Check SCBA at the start of each shift
6.6.4.2. Manage personal air supply and communicate status to Company Officer / Team Leader
6.6.4.3. Check SCBA prior to IDLH entry
6.6.4.4. Understand tactical objectives
6.6.4.5. Exit prior to the low air alarm sounding

6.6.5. Air Emergencies

6.6.5.1. Activation of a low-air alarm is an immediate action item for the individual and the crew involved. The personnel involved shall notify command of a low-air alarm activation and immediately exit the IDLH and provide a PAR upon exit. If a member is unable to exit due to being lost, trapped, or injured an immediate May-Day shall be called. Furthermore, if a member’s SCBA cylinder reaches 750 PSI or less and the member and crew are unable to exit the IDLH within 5 minutes or less an immediate May-Day shall be called.

6.6.6. Work Cycles

6.6.6.1. Members shall manage their air in a basic work cycle: Air to enter, Air to work, Air to exit, and a Safety margin. One work cycle shall be defined as working through a 4500 PSI / 45 minute cylinder with good air management and exiting the IDLH PRIOR to the activation of the low air alarm.

6.6.6.2. After one work cycle (4500 PSI / 45 minute cylinder) with good air management (exiting prior to low air activation), a crew may retrieve another cylinder and be re-deployed at the discretion of the IC. The Company Officer / Team Leader shall also monitor their crew to determine whether the work cycle within the IDLH was of such duration, excess exertion, or critical stress nature that an adequate rest cycle be ordered without re-deployment.

6.6.6.3. Crews and members that operate in the IDLH until and / or during the activation of the low air alarm have chosen a long work cycle. These crews and members shall be recommended to report to rehab or staging in order to maintain an appropriate work – rest rotation.

6.6.6.3.1. Members who work into their low air alarm should rotate through rehab prior to returning to IDLH operations.

6.6.6.3.2. Members who exit prior to their low air alarm activating may perform two work cycles prior to reporting to rehab for the first work – rest interval. Subsequent rotations should then follow a one-cylinder work cycle, then rehab format.

7. Program Surveillance

7.1. The Respiratory Protection Program Administrator shall audit the records and conduct routine assessments of this program on an as-needed basis to identify and document compliance with this program and OSHA 29 CFR 1910.134.

7.2. Department Chiefs, in conjunction with each agency’s Program Manager, shall audit their records and conduct routine assessments of their program on an as-needed basis to identify and document compliance with this program and OSHA 29 CFR 1910.134. A copy of this shall be kept at the ACFR Administration Office and with the Respiratory Protection Program Administrator. The records shall be kept in accordance with Table 4.
### TABLE 4

<table>
<thead>
<tr>
<th>Category</th>
<th>Record Type</th>
<th>Individual</th>
<th>Agency</th>
<th>Fire Rescue Administration</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Breathing Air Compressor and Purification System</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchase Date</td>
<td></td>
<td></td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>Inspections / Testing</td>
<td></td>
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<td>YES</td>
</tr>
<tr>
<td>Fill Log</td>
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<td></td>
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<td>YES</td>
</tr>
<tr>
<td>Maintenance / Repairs</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Air Quality (4 x year)</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Personnel</td>
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<tr>
<td>Current Respirator Use</td>
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<td>YES</td>
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<tr>
<td>Personnel Roster</td>
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<td>YES</td>
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<tr>
<td>Issued Equipment List (SCBA Mask, Half Face Respirator, etc)</td>
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<td>YES</td>
</tr>
<tr>
<td>OSHA Questionnaire</td>
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<tr>
<td>OSHA Questionnaire Recommendation</td>
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<td>YES</td>
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<td>YES</td>
</tr>
<tr>
<td>Fit Test (per issued mask)</td>
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<td>YES</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td>Annual Training</td>
<td></td>
<td>YES</td>
<td></td>
<td>YES</td>
</tr>
<tr>
<td><strong>Mask</strong></td>
<td></td>
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<tr>
<td>Flow Test</td>
<td></td>
<td>YES</td>
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<td>YES</td>
</tr>
<tr>
<td>Maintenance / Repairs</td>
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<td><strong>Maintenance Personnel</strong></td>
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<td>Manufacturer Certification</td>
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<td><strong>Cylinders</strong></td>
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<td>Hydro Test Date</td>
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<tr>
<td>Maintenance / Repairs</td>
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<td><strong>Maintenance Tools</strong></td>
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<tr>
<td>Flow Test Machine Calibration</td>
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<tr>
<td>Fit Test Machine Calibration</td>
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<tr>
<td>Torque Wrench Calibration</td>
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<tr>
<td><strong>Carrier / Harness</strong></td>
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<tr>
<td>Inventory with Serial Numbers</td>
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<tr>
<td>Daily Inspection per Apparatus Check Sheet (Att. X)</td>
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<td>YES</td>
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<tr>
<td>Flow Test (Annual and as Needed)</td>
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<td>YES</td>
</tr>
<tr>
<td>Maintenance / Repairs</td>
<td></td>
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</tbody>
</table>

*NOTE: Each agency shall maintain complete records as indicated only on individually purchased items.*
8. Selection of Respiratory Protection Devices for Acquisition

8.1. The nature and variety of tasks performed within fire and rescue require that several types of respiratory protective devices be available to members within the service. The selection criteria identified for respiratory protection include:

8.1.1. SCBA

8.1.1.1. Positive Pressure
8.1.1.2. Dependability
8.1.1.3. Cost
   8.1.1.3.1. Maintenance
   8.1.1.3.2. Training
   8.1.1.3.3. Implementation
8.1.1.4. Ease of Use
8.1.1.5. Ease of Upgrades
8.1.1.6. Dealer Support
8.1.1.7. Comprehensive Package
8.1.1.8. Sizes
8.1.1.9. Duration / Cylinder Capacity
8.1.1.10. Compatibility
8.1.1.11. Compliance Standards Met

8.1.2. Medical / EMS

8.1.2.1. Ease of Use
8.1.2.2. Cost
8.1.2.3. Compliance Standards Met
8.1.2.4. Dependability
8.1.2.5. Storage
8.1.2.6. Availability
8.1.2.7. Disposable
8.1.2.8. Sizes

8.1.3. Dust

8.1.3.1. Ease of Use
8.1.3.2. Cost
8.1.3.3. Compliance Standards Met
8.1.3.4. Dependability
8.1.3.5. Storage
8.1.3.6. Availability
8.1.3.7. Disposable
8.1.3.8. Sizes

8.1.4. Chemical, Biological, Radiological, Nuclear or Explosive (CBRNE)

8.1.4.1. Cost
   8.1.4.1.1. Maintenance
   8.1.4.1.2. Training
   8.1.4.1.3. Implementation
8.1.4.2. Extended Operation
8.1.4.3. Multiple Applications
8.1.4.4. Compatibility
8.2. The devices listed in Table 2 will encompass all the respiratory equipment for use within the member departments of the ACFR and have been selected based on the described criteria. No other devices are acceptable for use.

9. Air Quality Testing

9.1. All air used for the purpose of refilling SCBA shall meet the testing and quality requirements of NFPA 1982 and CGA G7.1, Commodity Specifications for Air, with a minimum quality of Grade D and a maximum dew point of -50°F (-45°C).

9.2. Purchased compressed breathing air supplied in cylinders from vendors must be certified and documented to meet the requirements of 9.1. Documentation shall show that the testing facility is accredited by the American Industrial Hygiene Association, the American Association for Accreditation Program.

9.3. The Respiratory Protection Program Administrator shall ensure that all respirable air produced from mobile or stationary breathing air compressors be tested to assure quality of air from the compressors and storage cylinders at least quarterly. If required by NFPA 1989, Standard on Breathing Air Quality for Emergency Services Respiratory Protection, that an air sample be drawn prior to and after any filter change in the air purification system of breathing compressors. The test shall be to determine that the air meets the quality requirements of 9.1. The testing laboratories must be accredited as outlined in 9.2. The laboratory shall be required to notify the Respiratory Protection Program Administrator immediately if the air does not meet these requirements.

9.4. Records shall be kept of the air quality testing. Should the air fail to meet the quality test, use of the air source must be immediately discontinued until such time as repairs have been made to correct the deficiency. The air must then be retested. If the sample passes the required test, the member department, Respiratory Protection Program Manager, and the Chief of ACFR will be notified, and the system may be placed back in service. A copy of these records will be maintained according to Table 4.

9.5. Should an air sample fail testing, all other cylinders possibly contaminated, including SCBA cylinders and cascade storage cylinders, must be emptied and purged before being refilled with air from a tested and approved source.

9.6. All breathing air compressor systems shall be equipped with a carbon monoxide monitor to detect CO contamination and to automatically shut down the system should CO levels be detected above the limit of 5 ppm per NFPA 1989.

9.7. All breathing air compressors shall be inspected and maintained in accordance with the manufacturer’s instructions to assure continued production of pure breathing air. This shall include regular scheduled maintenance and inspection or replacement of filters and other required components.

9.8. Detailed maintenance records shall be kept for each breathing air compressor and purification system indicating, at a minimum, the purchase date, inspection, maintenance, repairs, and testing of the system. A copy of these records will be maintained by ACFR.

10. Responsibilities

10.1. Respiratory Protection Program Administrator

10.1.2. Update the Respiratory Protection Program procedures as required.
10.1.3. Conduct compliance audits at work sites and report findings to the FEMS Advisory Board.
10.1.4. Oversee records management for respiratory protection program according to Table 4.
10.1.5. Oversee the maintenance, testing, and care of the respiratory protection apparatus utilized throughout the County.
10.1.6. Manage all CARE technicians.
10.1.7. Issuance
10.2. Program Managers

10.2.1. Follow requirements for compliance with OSHA 29 CFR 1910.134

10.2.1.1. Issuance.
10.2.1.2. Respiratory Training.
10.2.1.3. Respiratory Fit Testing.
10.2.1.4. All fit testing shall be performed in strict adherence to the protocol identified for the type of fit testing being performed. No deviations shall be accepted.
10.2.1.5. Facial hair compliance.
10.2.1.6. Cleaning.
10.2.1.7. Maintenance of respirators.
10.2.1.8. Conduct compliance audits at work sites within their departments.
10.2.1.9. Ensure copies of the records are sent to Fire Rescue Administration for records management according to Table 4.

10.3. Respirator Wearers

10.3.1. Wear respirator when and where required and in the manner in which he / she was trained.
10.3.2. Report any malfunctions of the respirator to his / her supervisor immediately.
10.3.3. Inspect, document, clean, and disinfect respirators as required.
10.3.4. Participate in annual medical evaluation questionnaires and fit testing.
10.3.5. Participate in ongoing training concerning respiratory protection.

10.4. Officers

10.4.1. Assure inspections and documentation are consistent with OSHA 29 CFR 1910.134.
10.4.2. Assure all personnel are trained appropriately concerning respirator usage.
10.4.3. Assure all members participate in annual medical evaluation questionnaires and fit testing.
10.4.4. Assure employees' and members' facial hair meets the requirements of OSHA 29 CFR 1910.134.
10.4.5. Identify to the Respiratory Protection Program Administrator when the need for additional medical evaluation is necessary.

10.5. Chief

10.5.1. Designate a Respiratory Protection Program Administrator.
10.5.2. Follow up with Respiratory Protection Program Administrator when notified of violations of this procedure.
Attachment A
OSHA Respirator Medical Evaluation Questionnaire

To the employee:

Can you read (circle one): Yes/No

Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A.
Section 1. (Mandatory)
The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date:_______________________________________________________
2. Your name:__________________________________________________________
3. Your age (to nearest year):_________________________________________
4. Sex (circle one): Male/Female
5. Your height: __________ ft. __________ in.
6. Your weight: ____________ lbs.
7. Blood Pressure (Today): _________________
8. Pulse (Today): _______________
9. Current Medications: ________________________________________________
10. Primary Physician: _______________________________________________
11. Primary Physician Address: _________________________________________
12. Primary Physician Phone Number: _________________________________
13. Your job title:_____________________________________________________
14. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): ___________________
15. The best time to phone you at this number: __________________________
16. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No

17. Check the type of respirator you will use (you can check more than one category):
   a. ___ N, R, or P disposable respirator (filter-mask, non-cartridge type only).
   b. ___ X ___ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).
18. Have you worn a respirator (circle one): Yes/No
If "yes," what type(s):
_____________________________________________________________________

Part A.
Section 2. (Mandatory)
Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you currently smoke tobacco, or have you smoked tobacco in the last month: Yes/No

2. Have you ever had any of the following conditions?
   - Seizures (fits): Yes/No
   - Diabetes (sugar disease): Yes/No
   - Allergic reactions that interfere with your breathing: Yes/No
   - Claustrophobia (fear of closed-in places): Yes/No
   - Trouble smelling odors: Yes/No

3. Have you ever had any of the following pulmonary or lung problems?
   - Asbestosis: Yes/No
   - Asthma: Yes/No
   - Chronic bronchitis: Yes/No
   - Emphysema: Yes/No
   - Pneumonia: Yes/No
   - Tuberculosis: Yes/No
   - Silicosis: Yes/No
   - Pneumothorax (collapsed lung): Yes/No
   - Lung cancer: Yes/No
   - Broken ribs: Yes/No
   - Any chest injuries or surgeries: Yes/No
   - Any other lung problem that you've been told about: Yes/No

4. Do you currently have any of the following symptoms of pulmonary or lung illness?
   - Shortness of breath: Yes/No
   - Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
   - Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
   - Have to stop for breath when walking at your own pace on level ground: Yes/No
   - Shortness of breath when washing or dressing yourself: Yes/No
Shortness of breath that interferes with your job: Yes/No
Coughing that produces phlegm (thick sputum): Yes/No
Coughing that wakes you early in the morning: Yes/No
Coughing that occurs mostly when you are lying down: Yes/No
Coughing up blood in the last month: Yes/No
Wheezing: Yes/No
Wheezing that interferes with your job: Yes/No
Chest pain when you breathe deeply: Yes/No
Any other symptoms that you think may be related to lung problems: Yes/No

5. Have you ever had any of the following cardiovascular or heart problems?
   Heart attack: Yes/No
   Stroke: Yes/No
   Angina: Yes/No
   Heart failure: Yes/No
   Swelling in your legs or feet (not caused by walking): Yes/No
   Heart arrhythmia (heart beating irregularly): Yes/No
   High blood pressure: Yes/No
   Any other heart problem that you've been told about: Yes/No

6. Have you ever had any of the following cardiovascular or heart symptoms?
   Frequent pain or tightness in your chest: Yes/No
   Pain or tightness in your chest during physical activity: Yes/No
   Pain or tightness in your chest that interferes with your job: Yes/No
   In the past two years, have you noticed your heart skipping or missing a beat: Yes/No
   Heartburn or indigestion that is not related to eating: Yes/ No
   Any other symptoms that you think may be related to heart or circulation problems: Yes/No

7. Do you currently take medication for any of the following problems?
   Breathing or lung problems: Yes/No
   Heart trouble: Yes/No
   Blood pressure: Yes/No
   Seizures (fits): Yes/No

8. If you've used a respirator, have you ever had any of the following problems? (If you've never used a
respirator, check the following space and go to question 9:)

Eye irritation: Yes/No
Skin allergies or rashes: Yes/No
Anxiety: Yes/No
General weakness or fatigue: Yes/No
Any other problem that interferes with your use of a respirator: Yes/No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

10. Have you ever lost vision in either eye (temporarily or permanently): Yes/No

11. Do you currently have any of the following vision problems?
    Wear contact lenses: Yes/No
    Wear glasses: Yes/No
    Color blind: Yes/No
    Any other eye or vision problem: Yes/No

12. Have you ever had an injury to your ears, including a broken ear drum: Yes/No

13. Do you currently have any of the following hearing problems?
    Difficulty hearing: Yes/No
    Wear a hearing aid: Yes/No
    Any other hearing or ear problem: Yes/No

14. Have you ever had a back injury: Yes/No

15. Do you currently have any of the following musculoskeletal problems?
    Weakness in any of your arms, hands, legs, or feet: Yes/No
    Back pain: Yes/No
    Difficulty fully moving your arms and legs: Yes/No
    Pain or stiffness when you lean forward or backward at the waist: Yes/No
    Difficulty fully moving your head up or down: Yes/No
    Difficulty fully moving your head side to side: Yes/No
    Difficulty bending at your knees: Yes/No
    Difficulty squatting to the ground: Yes/No
    Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes/No
    Any other muscle or skeletal problem that interferes with using a respirator: Yes/No
Attachment B

OSHA Respirator Questionnaire Medical Recommendation

Member Name: ______________________________________________________________

☐ This person can wear a respirator without restrictions.

☐ This person can wear a respirator subject to the following restrictions or limitations:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________

☐ This person cannot use a respirator.

☐ A follow-up medical evaluation is required.

I have provided the member named above with a copy of this recommendation.

PLHCP (Name): _____________________________________________________________

Signature: __________________________________________________________________

Date: _____________________________________________________________________
## ANNUAL RESPIRATORY RETRAINING

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<td>2. What the limitations and capabilities are of the respirator.</td>
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<td>3. How to use the respirator effectively in emergency situations, including situations when the respirator malfunctions.</td>
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<td>4. How to inspect, put on and remove, use, and check the seals of the respirator.</td>
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<td>5. What the procedures are for maintenance and storage of the respirator.</td>
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<td>6. How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.</td>
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<td>7. The general requirements of this section (K) (1).</td>
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Attachment D

Respiratory Issuance Compliance Form

I certify that ________________________________ (member name) is a member in good standing with ________________________________ (agency name), has completed the annual OSHA Respiratory Medical Evaluation Questionnaire or a medical examination that obtains the same information, has completed an annual Fit Test, and is either actively enrolled in an ACFR Fire Academy, certified to at least NFPA 1403, or qualified through agency training if a member since prior to 2006.

Agency Chief Name: ___________________________________________________________

Agency Chief Signature: _______________________________________________________

Date: __________________________
### Attachment E

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