2.01 **PURPOSE**

To establish rules, procedures, and guidelines relative to respiratory protection that reflects the Sonoma County Fire and Emergency Services Department (County Fire) commitment to the safety and well being of our members and compliance with CAL/OSHA Title 8, Section 5144.

2.02 **SCOPE**

All County Fire paid and volunteer staff

2.03 **POLICY**

County Fire is committed to maintaining an injury free workplace, and making every effort to protect our members from harmful airborne substances. We accomplish this through engineering controls such as air monitoring and ventilation and through administrative controls limiting the duration of exposure. When these methods are not adequate, we provide respirators to allow members to breathe safely in potentially hazardous environments.

We recognize that respirators have limitations and their successful use is dependant upon an effective respiratory protection program. This Respiratory Protection Program is designed to: identify, evaluate, and control exposure to respiratory hazards; select and provide the appropriate respirators; and coordinate all aspects required for proper use, care and maintenance of the equipment.

2.04 **PROCEDURES**

1. **Program Administration:**

   County Fire will provide leadership by example and insure that adequate resources are available for effective implementation of our Respiratory Protection Program. We expect and require all members to work conscientiously to carry out our Respiratory Protection Program, which is an element of our Injury and Illness Prevention Program. The County Fire Safety Officer is the program administrator who has the authority and responsibility for overall management and administration of our Respiratory Protection Program, which consists of the following:
   a. Preparing, evaluating and modifying the written respiratory protection program
   b. Identifying, locating, and maintaining ongoing surveillance and evaluation of airborne exposures
   c. Selecting respirators
   d. Conducting medical screening for potential respirator users
   e. Conducting respirator fit testing and assignment
   f. Training
   g. Record keeping

   To assist the program administrator, certain aspects of the program will be delegated to others.
within County Fire. All supervisors are responsible for members under their supervision.

2. **Program Implementation and Evaluation**
   Our Respiratory Protection Program begins with this written plan describing the procedures that we practice. Suggestions and comments from employees and volunteers about exposure conditions, respirators, personal health changes, and training issues will be addressed promptly.

3. **Workplace Exposure Assessment and Ongoing Surveillance**
   Our first task in the workplace is an exposure assessment to identify harmful airborne contaminants and document their extent and magnitude, and how to control them. We must ensure that employee exposure does not exceed the permissible concentrations specified in the *California Code of Regulations* Title 8, Section 5155. This requires the department’s Safety Officer to evaluate the policies and procedures and conduct exposure monitoring. We conduct air monitoring at Hazardous Materials incidents and at fires to ensure that contaminants are identified and that concentrations do not exceed the published PELs. Additional evaluations are necessary if exposures change due to new materials, operational changes or other conditions increasing the degree of exposure or stress.

4. **Respirator Selection**
   In those instances where engineering and administrative means do not achieve the desired control, or in the case of an emergency, respirators **MUST** be worn. Different types of respirators are available for a variety of applications and we must ensure that the proper NIOSH/MSHA approved respirator is selected and used for the kind of work being performed and hazards involved.
   Given the type of environment, operations, and response our personnel participate in, the following types of respiratory protection are available:
   a. Self-contained positive pressure breathing apparatus
   b. Air Purifying Respirators
   c. HEPA filter respirator (N95) and (P100)
   All unknown products will be considered an IDLH environment requiring Positive Pressure Self-contained Breathing Apparatus (SCBA).

5. **Evaluating Respirator Wearer Health Status**
   Even with the appropriate equipment and adequate training provided, health status must be considered before allowing respirator use. The wearer’s physical condition, duration and difficulty of the task, toxicity of the contaminant, and type of respirator all affect the employee’s ability to wear a respirator while working. Also, respirators are uncomfortable and may reduce the wearer’s field of vision. Therefore there is a medical evaluation to assess the employee or volunteer’s ability to work while wearing a respirator.

Each member will be provided with the physical status questionnaire packet consisting of the following:
   a. OSHA Respirator Medical Questionnaire.
   b. An envelope addressed to the Department’s Designated Physician marked *Confidential* and affixed with the appropriate postage.
   c. A referral for medical evaluation.
This packet is to be completed and forwarded to the Occupational Health Physician. Members will not wear respirators of any type during emergency activities until the Department has received the appropriate clearance from the Occupational Health Physician. These forms shall be updated annually.

6. Respirator Fit Testing & Assignment

Following completion of the mandatory medical questionnaire and selection of the appropriate type of respirator, each member will participate in a qualitative fit test; the purpose of which is to determine the best fitting face piece, model, and size for the member.

Hazardous Materials Emergency Response Team members will participate in a quantitative fit testing procedure due to the type of response they are assigned to.

Fit testing and respirator selection will be conducted consistent with CAL/OSHA Title 8, Section 5144, Appendix A, and will be conducted upon appointment and annually thereafter.

The form “Respirator Fit Testing and Assignments” (Appendix 2) shall be used to document fit test results and respirator assignment. This form shall be maintained in the member’s personnel and training records.

Members who have facial hair that comes between the sealing surface of the face-piece and the face, or that interferes with the valve function; or any condition that interferes with the face-to-face piece seal or valve function, shall not be fit tested. In addition, it shall be the responsibility of the responder and the Chief to ensure that at no time will a member with facial hair be allowed to don a respirator and therefore shall be excluded from any response requiring respiratory protection.

Any member that is not fit tested and subsequently medically cleared for respirator use, shall not participate in any activity requiring respiratory protection or activities with the potential for requiring respirator use. This shall include any structure fire interior attack, vehicle fire attack, structure fire back up team and/or Rapid Intervention Crew (RIC), hazardous materials response, medical response, etc. Members shall be defined as any County Fire paid or volunteer personnel, who may have to don and place in operation any type of respiratory protective devise.

7. Training

Once the member is fitted with the correct respirator for the task, the County Fire Training Officer will ensure he/she is thoroughly trained in the need, use, limitations, inspection, fit checks, maintenance, and storage of the equipment. Ordinarily this training is initiated during the fit test and will be completed in accordance with Appendix E of the CAL/OSHA “Guide to Respiratory Protection”.

The manufacturer provides detailed instructions for the use and care of the respirator with the equipment. This information is to be used in the training. Each employee required to wear a Self Contained Breathing Apparatus shall meet or exceed the training as outlined in the State of California Fire Fighter I program for Self Contained Breathing Apparatus. At a minimum, annually each employee will demonstrate their competency by manipulative skills and written testing. The manufacturer’s Training Guidelines for M.S.A. Self Contained Breathing Apparatus shall be used as reference for all training standards pertinent to SCBA use/maintenance.
8. **Air Manufacturing Program**  
   County Fire shall meet the standards set forth in the OSHA “A Guide to Respiratory Protection at Work”, (Air Quality). Also see compressed Air Quality Program below.

9. **Record Keeping**  
The County Fire Safety Officer shall document each major component of our program to:
   a. Verify that each activity has occurred  
   b. Evaluate the success of the program  
   c. Satisfy regulatory requirements

   These records include the written program, exposure determination, respirator selection, physical status evaluation, a fit testing and respirator assignment, training form and program assessments.

10. **Compressed Air Quality Program**  
   County Fire is committed to maintaining its compressed air quality program and meeting all codes and requirements.
   a. County Fire cooperates with the Windsor Fire Protection District in the operation of a high-pressure air compressor and maintains a compressor with a cascade system on the Rehabilitation unit to refill compressed air cylinders.
      Any other compressors used via cooperative agreements with other fire departments must be maintained and operated per OSHA requirements. The member refilling the cylinder is responsible to insure the compressor is in compliance with subsection d.
   b. All members assigned to fill SCBA bottles are trained in the safe and proper operation of the compressor.
   c. County Fire has an agreement with TRI Environmental as our maintenance contractor. TRI Environmental shall conduct, on a semi-annual basis, all scheduled preventative maintenance. When non-scheduled repairs are needed the County Fire Materials Handler shall notified TRI Environmental as soon as possible to conduct the repair.
   d. Air compressors shall, at a minimum, be tested for air quality on a quarterly basis. The test shall be done in accordance with the testing lab’s requirements. The air samples shall be sent to TRI Environmental where staff will notify the FESD Safety Officer if test deficiencies are found. The lab will notify the tester on record immediately. If no problems are found with the sample, the lab will mail a certification of the test taken, which will be kept on file at the Windsor Fire Protection District. A copy of the verification will be sent to the County Fire Safety Officer. All air tests at a minimum, shall meet the criteria set forth in CGA G7.1 and NFPA Std, 5-34.1 for grade E air.
   e. Scheduled preventative maintenance shall be done on a 6-month cycle and will include at a minimum; filter changes, oil change if needed (100 hrs), and check control system valves as outlined in the maintenance contract.
   f. All maintenance shall be logged on the form Semi-Annual Compressed Air Quality Report, (Appendix 9).

2.05 **REFERENCES**

   Cal/OSHA Title 8, Section 5144