

Respiratory Protection Program

RS 004-2

It is the policy of Mecklenburg EMS Agency to protect the health and safety of its employees by (1) eliminating hazardous exposures where feasible; (2) using engineering and administrative controls to minimize hazardous exposures that cannot be eliminated; and (3) using respiratory protection and other personal protective equipment when the frequency and duration of exposures cannot be substantially reduced or eliminated.

Purpose

The purpose of this respiratory protection program (RPP) is to maximize the protection afforded by respirators when they must be used. It establishes the procedures necessary to meet the regulatory requirements described in OSHA's Respiratory Protection standard (29 CFR 1910.134). This program applies to all employees who are required to wear respiratory protection due to the nature of their work at Medic. Respirators used include N95 and ½ faced masks.

Responsibilities

Respirator Program Administrator

The Risk and Safety Supervisor has been designated as the respirator program administrator (RPA). The RPA has received appropriate training and is knowledgeable about the requirements of the OSHA Respiratory Protection standard and all elements of the respiratory protection program that need to be implemented to be effective. Agency Directors have the ultimate responsibility for all aspects of this program and has given the authority to make the necessary decisions to ensure its success. This authority includes, but is not limited to, conducting hazard assessments for selecting appropriate respiratory protection and developing and implementing the policies procedures described in the written RPP.

Specifically, the RPA or other risk and safety staff in conjunction with the RPA will, in accordance with OSHA's Respiratory Protection standard (29 CFR 1910.134):

- Conduct a hazard assessment and select the appropriate level of respiratory protection for each task or job title with potential exposure and record this information in the "Respirator Assignments" in Appendix A of this RPP.
- Develop and monitor respirator maintenance procedures found in Attachment A.4.
- Assist with coordinating the purchase and replacement of respirators if needed.
- Routinely evaluate the effectiveness of the RPP, with employee input, and make any necessary changes to the program.
- Provide or arrange for annual training on the use and limitations of respirators.
- Ensure that medical evaluations are provided.
- Ensure that annual respirator fit testing is provided.
- Maintain records of respirator training, medical clearance, and fit testing as required by 29 CFR 1910.134 and 29 CFR 1910.1020.
- Maintain a copy of this written RPP and program evaluations, and ensure that they are accessible to anyone in the program.

Supervisors

Supervisors of employees included in the RPP will:



- Participate in the hazard assessment by evaluating all potential exposures to respiratory hazards, including exposure to chemicals, aerosol transmissible disease pathogens, and communicating this information to the RPA.
- Identify employees and/or tasks for which respirators may be required and communicate this information to the RPA.
- Be responsible for ensuring that employees follow the procedures outlined in the RPP. Assist with scheduling employees for medical evaluations, training, and fit testing by ensuring that they attend these appointments and/or fit testing events and that they are paid for their time.

Employees in the Program

Employees assigned to jobs/tasks requiring the use of a respirator will:

- Complete the required questionnaire for medical clearance and participate in a medical examination if necessary.
- Adhere to Agency policies on facial hair and respirator seal protection.
- Attend annual training and respirator fit testing as required in the RPP.
- Use, maintain, and dispose of respirators properly in accord with training and the procedures in the RPP.

Respirator Selection

Hazard Assessment

The RPA will select the types of respirators to be used by Agency staff based on the hazards to which employees may be exposed in accord with OSHA regulations, Centers for Disease Control, and other public health guidelines. With input from the respirator user, the RPA or their designee will conduct a hazard assessment for each task, procedure, or work area with the potential for airborne contaminants. The hazard assessment will include the following as needed:

• Identification of potential exposures. The most common potential exposure for employees involved in patient care will be airborne pathogens associated with tuberculosis, COVID-19, influenza, and other airborne infectious diseases.

The following definitions apply to equipment that may be issued to employees under this program:

- o **Half mask elastomeric respirators** are reusable air-purifying respirators that fit over the nose and mouth. They are made of rubber or silicone with attached cartridges or filters for removal of gases, vapors, or dust. Cartridges should be replaced when contaminated or after 40 hours of use.
- o **N95 respirator** is a generally used term for a half mask negative pressure air-purifying respirator with NIOSH-approved N95 filters or filter material (i.e., includes N95 filtering facepiece respirator or equivalent protection). N95 respirators should be replaced as needed and discarded when contaminated with blood, nasal secretions, or other bodily fluids.

Updating the Hazard Assessment

The RPA will revise and update the hazard assessment any time an employee or supervisor identifies or anticipates a new exposure or changes to existing exposures. Any employee who believes that respiratory protection is needed during a particular activity must contact their



supervisor or the RPA. The supervisor must contact the RPA whenever respiratory protection is requested. The RPA will assess the potential hazard with the employee and supervisor. If it is determined that respiratory protection is needed, all elements of this program will be in effect for those tasks and the program will be updated accordingly.

Medical Evaluation

Employees whose work activities require the use of respiratory protective equipment shall receive medical clearance prior to the use of a respirator and prior to being fit tested for a respirator. Medical evaluations will be performed by a physician or other licensed health care professional at Concentra on South Blvd in Charlotte. The evaluations are kept medically confidential and are provided at no cost to the employee.

Before being assigned to work in an area where respirators are required, each employee will complete the questionnaire, Attachment A.1 of this RPP. The Agency Employee Health Case Coordinator will review each questionnaire and determine if the employee needs further medical evaluation, according to the medical director's guidelines.

If it is determined that an employee needs further medical evaluation, a copy of the questionnaire along with instructions on what to do will be provided to the employee. The questionnaire will be provided to Concentra by the employees during their visit. Concentra will be provided with a copy of the RPP, information from the RPA about the type of respiratory protection to be used by employees, duration and frequency of respirator use, expected physical effort, other protective equipment worn, and any expected extremes of temperature or humidity.

The Concentra provider will review completed questionnaires and make medical determination as to whether the employee can wear a respirator safely. The provider may make this determination based on the questionnaire alone but may also require a physical examination of the employee and any tests, consultations, or procedures deemed necessary. The final recommendation will be provided to the employee and the Employee Health Case Coordinator upon completion.

An additional medical evaluation is required when:

• The employee reports medical signs or symptoms that are related to the ability to use a respirator. • An employee, supervisor, or the RPA requests a reevaluation. • Observations made during fit testing or program evaluation indicate a need for reevaluation (e.g., the employee experiences claustrophobia or difficulty breathing during the fit test). • A change occurs in workplace conditions (e.g., physical work effort, protective clothing, or temperature) that may result in a substantial increase in the physiological burden placed on an employee wearing a respirator.

Fit Testing

Before an employee is required to use any respirator with a tight-fitting facepiece, they will be fit tested by a member of Risk and Safety or their designee.

There is no requirement for certification of fit testers but the person doing the fit testing must understand and follow the fit test protocol, (Appendix B), understand how to train the wearer to don the respirator properly, and how to do a user seal check per Appendix C of this RPP. At least 15 minutes per person will be needed to show the employee how to put the respirator on, position it, and assess its comfort, perform the user seal check, and complete the fit testing.



Employees who use tight-fitting respirators, to include an N95 and ½ faced mask, are not permitted to have facial hair that interferes with the facepiece seal or valve function. Fit tests will be provided at the time of the initial assignment and annually thereafter. Additional fit tests will be provided whenever the employee experiences or the supervisor or RPA observes physical changes that could affect respirator fit. These changes include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight. A qualitative fit test will be used for fit testing and will follow the protocol Bitrex solutions found in Appendix A of the OSHA Respiratory Protection standard (29 CFR 1910.134) and in Appendix B of this RPP.

Training

Annual respirator training will be provided for all employees covered by this program. The training will be conducted by a member of Risk and Safety or their designee and will include the following:

• The general requirements of the OSHA Respiratory Protection standard. • The specific circumstances under which respirators are to be used. • Respiratory hazards to which employees are potentially exposed during routine and emergency situations. • Why the respirator is necessary and how proper fit, usage, and maintenance can ensure the protective effect of the respirator as well as how improper fit, usage, or maintenance can compromise the protective effect of the respirator. • The limitations and capabilities of the respirators that will be used. • How to effectively use the respirators, including emergency situations and situations in which the respirator malfunctions. • How to inspect, put on, remove, use, and check the seals of the respirator • The procedures outlined in this program for maintenance, storage, and cleaning or disposal of respirators. • How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators. • How and when to decontaminate (or safely dispose of) a respirator that has been contaminated with hazardous/infectious biological materials. Training shall be provided at the time of initial assignment to respirator use, but before actual use, and annually thereafter. Additional training will be provided when there is a change in the type of respiratory protection used, or when inadequacies in the employee's knowledge or use of the respirator indicate that they have not retained the requisite understanding or skill. The employee will also receive training during the fit testing procedure that will provide an opportunity to handle the respirator, have it fitted properly, and to test its seal. Every respirator wearer will receive fitting instructions, including demonstrations and practice in how the respirator should be worn, how to adjust it, and how to perform a user seal check according to the manufacturer's instructions.

Employees will be given the opportunity during training, annual retraining and throughout the year to provide feedback on the effectiveness of the program and suggestions for its improvement.

Respirator Use

Employees will follow procedures for the proper use of their respirators under conditions specified by this program and in accordance with the training they receive on the use of each model or type of respirator. The appropriate types of respirators to be used and the exposure conditions are listed in Appendix A of this RPP. Respirators relying on a tight facepiece-to-face seal must not be worn when conditions prevent a good seal. Such conditions may be a beard,



long mustache, sideburns, or even razor stubble as well as scars, other facial deformities, piercings, and temple pieces on glasses. In addition, the absence of one or both dentures can seriously affect the fit of a facepiece. Employees and supervisors are expected to be diligent in observing practices pertaining to ensuring the safe use of respirators. To ensure proper protection, the wearer will perform a user seal check, in accordance with manufacturer's instructions and the training provided at the time of fit testing, each time an employee puts on a tight-fitting respirator. Employees who wear corrective glasses or other personal protective equipment must wear these during their fit testing to ensure that it does not interfere with the facepiece seal.

Employees must leave the respirator use area:

- To adjust their respirator if the respirator is not fitting correctly or impeding their ability to work.
- To wash their face if the respirator is causing discomfort or rash. To change the respirator or cartridges.

Storage, Reuse, Maintenance, and Care of Respirators

Respirators will be stored in a manner to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. They should be packed or stored to prevent deformation of the facepiece and kept accessible to the work area and stored in accordance with any applicable manufacturer instructions. Filter cartridges must be stored separately from respirator facepieces that have been cleaned. This is to prevent contamination of the interior of the respirator facepiece from hazardous materials that may have accumulated on the filter cartridge. When caring for infectious patients, disposable filtering facepiece respirators (N95's) will be discarded after each use (i.e., patient encounter). Reusable elastomeric respirators (1/2 face masks) that are assigned to individual users will be cleaned and disinfected/sterilized after use and stored at room temperature in a dry area that is protected from exposure to hazardous contaminants as per the manufacturer's instructions.

Inspection, Maintenance, and Repairs

All respirators will be inspected by the user prior to each use. Inspections should include a check of:

- Condition of the various parts including, but not limited to, the facepiece, head straps, valves, and cartridges. All rubber or plastic parts, for pliability and signs of deterioration. Any defective respirators shall be removed from service and replaced. Keep respirators accessible.
- Store respirators in accordance with any applicable manufacturer instructions. Inspect respirators at least monthly and in accordance with the manufacturer's recommendations. Check for proper function before and after each use.

Cleaning and Disinfection

Reusable respirators will be cleaned with mild soap and warm water and air dried before storing in a plastic bag for reuse. Reusable respirators issued for the exclusive use of an employee will be cleaned and disinfected by the user as often as necessary to maintain a sanitary condition. Reusable respirators used in fit testing and training will be cleaned and disinfected after each use.



Program Evaluation

The RPA will conduct a periodic evaluation of the RPP to ensure that all aspects of the program meet the requirements of the OSHA Respiratory Protection standard and that the RPP is being implemented effectively to protect employees from respiratory hazards. This evaluation will be done as necessary. Program evaluation will include, but is not limited to:

• A review of the written program. • A review of feedback obtained from employees (to include respirator fit, selection, use, and maintenance issues) that will be collected during the annual training session.

The RPP will be revised as necessary, and records of revisions will be kept on file with the written program. Any procedural changes that are implemented because of program evaluation will be communicated to the employees and reinforced by their supervisors.

Recordkeeping

The RPA will ensure that the following records are maintained:

• Personnel medical records such as medical clearance to wear a respirator shall be retained by the Employee Health Case Coordinator as part of a confidential medical record. Medical clearance records must be made available in accord with the OSHA Access to Employee Exposure and Medical Records standard (29 CFR 1910.1020) and maintained for a minimum of thirty (30) years after an employee's separation or termination. • Documentation of training and fit testing will be kept until the next training or fit test. A copy of this RPP and records of program evaluations and revisions shall be kept by Risk and Safety and made available via Medic's website to all affected employees and representatives of OSHA upon request.



Respirator Assignments

RS 004-2, Appendix A

Respirators will be worn by all employees in positions listed below when providing care that involves performing aerosol-generating procedures on patients and when there is a potential for transmission of communicable disease (infectious aerosols) such as tuberculosis, meningitis, COVID-19, and influenza. These situations must be immediately recognized by the employee, and respiratory protection should be implemented immediately.

Employees are expected to wear the type of respirator, N95 or ½ mask, that they were last successfully fit tested and trained on.

<u>Position</u>	<u>Task</u>	<u>Respirator</u>	<u>Hazard</u>	Respirator Location
EMT	Patient Care		Airborne	Personal Protective
Paramedic	and Transport	N95	Communicable	Equipment Cabinet
			Disease	on Ambulance
EMT	Patient Care		Airborne	Kept with User in
Paramedic	and Transport	½ Face Mask	Communicable	Gear Bag
			Disease	

NOTE: N95's are for employee use only. Surgical masks can be found in the Personal Protective Equipment Cabinet on Ambulance for patient use.

Special Operations Paramedics

Mecklenburg EMS Agency has Special Operations Paramedics that work in conjunction with CMPD on the Special Weapons and Tactics team and the Civil Emergency Unit. These paramedics operate under the CMPD respiratory program, due to the use of the CMPD respirators.

Note: The Agency does not have a voluntary use policy. Any respirator used shall be issued by the Agency and shall follow requirements within this RPP.



Fit Testing Protocols

RS 004-2, Appendix B

Appendix A to Sec.1910.134: Fit Testing Procedures (Mandatory)
Part I. OSHA-Accepted Fit Test Protocols

A. Fit Testing Procedures--General Requirements

- 1. The employee shall be allowed to choose the most acceptable respirator from enough respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.
- 2. Prior to the selection process, the employee 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 an acceptable fit. A mirror shall be available to assist the employee in evaluating the fit and positioning of the respirator. This instruction may not constitute the employee's formal training on respirator use, because it is only a review.
- 3. The employee shall be informed that they are being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.
- 4. The employee shall be instructed to hold each chosen facepiece up to the face and eliminate those that obviously do not give an acceptable fit.
- 5. The more acceptable facepieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn for at least five minutes to assess comfort. If the employee is not familiar with using a particular respirator, the employee shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.
- 6. Assessment of comfort shall include a review of the following points with the employee and allowing the employee adequate time to determine the comfort of the respirator:
 - (a) Position of the mask on the nose
 - (b) Room for eye protection
 - (c) Room to talk
 - (d) Position of mask on face and cheeks
- 7. The following criteria shall be used to help determine the adequacy of the respirator fit:
 - (a) Chin properly placed
 - (b) Adequate strap tension, not overly tightened
 - (c) Fit across nose bridge
 - (d) Respirator of proper size to span distance from nose to chin
 - (e) Tendency of respirator to slip
 - (f) Self-observation in mirror to evaluate fit and respirator position
- 8. The employee shall conduct a user seal check. Before conducting the negative and positive pressure checks, the employee shall be told to seat the mask on the face by moving the head from side-to-side and up and down slowly while taking in a few slow deep breaths. Another facepiece shall be selected and retested if the employee fails the user seal check tests.



- 9. The test shall not be conducted if there is any hair growth between the skin and the facepiece 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.
- 10. If an employee exhibits difficulty in breathing during the tests, they shall be referred to the Employee Health Case Coordinator.
- 11. If the employee finds the fit of the respirator unacceptable, the employee shall be given the opportunity to select a different respirator and to be retested.
- 12. Exercise regimen. Prior to the commencement of the fit test, the employee shall be given a description of the fit test and the employee's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the employee will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.
- 13. The fit test shall be performed while the employee is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.
- 14. Test Exercises
 - (a) Normal breathing. In a normal standing position, without talking, the employee shall breathe normally.
 - (b) Deep breathing. In a normal standing position, the employee shall breathe slowly and deeply, taking caution so as not to hyperventilate.
 - (c) Turning head side to side. Standing in place, the employee 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 employee can inhale at each side.
 - (d) Moving head up and down. Standing in place, the employee shall slowly move his/her head up and down. The employee shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).
 - (e) Talking. The employee shall talk out loud slowly and loud enough to be heard clearly by the test conductor. The employee can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

- (f) Grimace. The test employee shall grimace by smiling or frowning.
- (g) Bending over. The test employee shall bend at the waist as if they were to touch their toes.
- (h) Normal breathing.



Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The employee shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

B. Qualitative Fit Test (QLFT) Protocols

<u>Bitrex™</u> (Denatonium Benzoate) Solution Aerosol Qualitative Fit Test Protocol

The BitrexTM (Denatonium benzoate) solution aerosol QLFT protocol uses the published saccharin test protocol because that protocol is widely accepted. Bitrex is routinely used as a taste aversion agent in household liquids which children should not be drinking and is endorsed by the American Medical Association, the National Safety Council, and the American Association of Poison Control Centers. The entire screening and testing procedure shall be explained to the employee prior to the conduct of the screening test.

Taste Threshold Screening

The taste threshold screening, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the taste of the screening solution. This threshold screening can be done with saccharin or Bitrex fit test solution.

- During threshold screening as well as during fit testing, employees shall wear an enclosure. The
 front portion of the enclosure shall be clear from the respirator and allow free movement of the
 head when a respirator is worn.
- 2. The test enclosure shall have a 3/4-inch (1.9 cm) hole in front of the employee's nose and mouth area to accommodate the nebulizer nozzle.
- 3. The employee shall don the test enclosure. Throughout the threshold screening test, the employee shall breathe through their slightly open mouth with tongue extended. The employee is instructed to report when they detect a bitter taste.
- 4. Using a Nebulizer, the test conductor shall spray the Threshold Check Solution into the enclosure. This Nebulizer shall be clearly marked to distinguish it from the fit test solution nebulizer.
- 5. To produce the aerosol, the nebulizer bulb is firmly squeezed so that the bulb collapses completely and is then released and allowed to fully expand.
- 6. An initial ten squeezes are repeated rapidly and then the employee is asked whether the solution can be tasted. If the employee reports tasting the bitter taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes completed.
- 7. If the first response is negative, ten more squeezes are repeated rapidly, and the employee is again asked whether the solution is tasted. If the employee reports tasting the bitter taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes completed.



- 8. If the second response is negative, ten more squeezes are repeated rapidly, and the employee is again asked whether the solution is tasted. If the employee reports tasting the bitter taste during the third set of ten squeezes, the screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes completed.
- 9. The test conductor will take note of the number of squeezes required to solicit a taste response.
- 10. If the solution is not tasted after 30 squeezes, the employee is unable to taste the solution and may not perform the fit test.

Note: If the test employee eats or drinks something sweet before the screening test, they may be unable to taste the solution.

- 11. If a taste response is elicited, the employee shall be asked to take note of the taste for reference in the fit test.
- 12. Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.
- 13. The nebulizer shall be thoroughly rinsed in water, shaken to dry, and refilled at least each morning and afternoon or at least every four hours.

Bitrex Solution Aerosol Fit Test Procedure

The test employee may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test.

- 1. The fit test uses the same enclosure as that described above.
- 2. The test employee shall don the enclosure while wearing the selected respirator. The respirator shall be properly adjusted and equipped with any type of particulate filter(s).
- 3. A second Nebulizer is used to spray the fit test solution into the enclosure. This nebulizer shall be clearly marked to distinguish it from the screening test solution nebulizer.
- 4. As before, the test employee shall breathe through their slightly open mouth with tongue extended and be instructed to report if they detect a bitter taste.
- 5. The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of the fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test.
- 6. After generating the aerosol, the test employee shall be instructed to perform the exercises provided.
- 7. Every 30 seconds the aerosol concentration shall be replenished using one half the number of squeezes used initially (e.g., 5, 10 or 15).
- 8. The test employee shall indicate to the test conductor if at any time during the fit test a bitter taste is detected. If the test employee does not report tasting a bitter taste, the test is passed.
- If a bitter taste is detected, the fit is deemed unsatisfactory, and the test is failed. A different respirator shall be tried, and the entire test procedure is repeated (taste threshold screening and fit testing).
- 10. Since the nebulizer tends to clog during use, the test operator must make periodic checks of the nebulizer to ensure that it is not clogged. If clogging is found at the end of the test session, the test is invalid.



User Seal Check Procedures

RS 004-2, Appendix C

Appendix B-1. to Sec. 1910.134: User Seal Check Procedures (Mandatory)

The individual who uses a tight-fitting respirator (1/2 Faced Mask) is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this appendix or the respirator manufacturer's recommended user seal check method shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

I. Facepiece Positive and/or Negative Pressure Checks.

- A. Positive pressure check. Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.
- B. Negative pressure check. Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

II. Manufacturer's Recommended User Seal Check Procedures.

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.

Attachments include:

- A.1, Medical Clearance Questionnaire
- A.2, Respirator Fit Test Exercises
- A.3, Qualitative Respirator Fit Test Record
- A.4, Maintenance of Replaceable Filter Half Faced Mask Respirator
- A.5, Cartridge Change Out