

**DEPARTMENT OF THE ARMY
HEADQUARTERS, U.S. ARMY SIGNAL CENTER AND FORT GORDON
Fort Gordon, Georgia 30905-5000**

**USASC&FG Regulation
No. 40-8**

8 January 2009

**Medical Services
RESPIRATORY PROTECTION PROGRAM**

Summary. This revised regulation updates responsibilities and procedures for the effective operation of the Fort Gordon Respiratory Protection Program.

Applicability. This regulation applies to all Department of Defense (DOD) personnel assigned to Fort Gordon, GA and its tenant organizations while performing work/tasks requiring the use of respirators as Personal Protective Equipment (PPE).

Supplementation. Supplementation of this regulation is prohibited unless specifically approved by the Commander, United States Army Signal Center and Fort Gordon (USASC&FG).

Suggested improvements. The proponent of this regulation is the Directorate of Health Services Preventive Medicine Careline, Dwight David Eisenhower Army Medical Center (DDEAMC). Users are invited to send comments and/or suggested improvements on Department of the Army (DA) Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, USASC&FG, ATTN: ATZH-HS (Preventive Medicine), Fort Gordon, Georgia 30905 and/or submit DA Form 1045 (Army Ideas for Excellence Program (AIEP) Proposal) to the installation AIEP coordinator.

Availability. This publication is available on the USASC&FG publications website at <http://www.gordon.army.mil/dhr/DocMgt/docmgt/htm>

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1. Purpose. To establish and/or update responsibilities and procedures for the effective operation of the Fort Gordon Respiratory Protection Program. This program shall be administrated by the local Industrial Hygienist assigned to DDEAMC, Fort Gordon, Georgia. Legal requirements and

***This regulation supersedes USASC&FG Regulation 40-8, 15 October 1999.**

procedures are based on the Occupational Safety and Health Administration (OSHA), 29 Code of Federal Regulations (CFR), Part 1910.134, Respiratory Protection, and guidance contained in Army Regulation (AR) 11-34.

2. Scope. This regulation applies to all Department of Defense (DOD) personnel assigned to and working on Fort Gordon, Georgia performing work requiring the use of respirators as Personal Protective Equipment (PPE). At DDEAMC contract personnel involved in direct patient care as Healthcare providers and Housekeeping staff in support of the DDEAMC Healthcare mission are included in the scope of DoD personnel. Conditions requiring the use of respirators include:

- a. When engineering and/or administrative work practice controls cannot be used to adequately control workplace hazard(s).
- b. During interim periods while engineering controls are being researched, designed, or installed to eliminate the hazard(s).
- c. During emergencies.
- d. When required by other Federal regulation or operating licenses.

3. References.

- a. AR 11-34, The Army Respiratory Protection Program, February 1990.
- b. AR 40-5, Preventive Medicine, May 2007.
- c. 29 CFR, Part 1910.134, Respiratory Protection, Occupational Safety and Health Administration (OSHA), December 2008.

4. Responsibilities and procedures.

- a. Garrison Commander – Installation Support, Installation Management Agency will:
 - (1) Be responsible for implementing and managing the Fort Gordon Respiratory Protection Program in coordination with DDEAMC- Preventive Medicine Careline- Industrial Hygiene (IH) Section.
 - (2) Ensure that Directorates/Departments where personnel are exposed to inhalation hazards requiring the use of respirators coordinate all respirator issues directly with IH manager.
 - (3) Request the IH Section perform surveys where personnel without respiratory protection are working in an atmosphere suspected to be hazardous to health.
 - (4) Designate, in consultation with the industrial hygienist, the type of respiratory protective equipment to be purchased and used.
 - (5) In consultation with IH, provide guidance and approval to supervisors in the preparation of a standing operating procedure (SOP) on respirator use in their particular work areas.

(6) In coordination with Industrial Hygienist, approve or disapprove routine entry into an immediately dangerous to life or health environment (including confined space).

(7) In coordination with respirator program administrator (IH), conduct regular inspections of work areas to ensure compliance and continued effectiveness of the Respiratory Protection Program.

(8) In coordination with program administrator, ensure prompt corrective action is taken on deficiencies which are detected in the Respiratory Protection Program.

(9) Conduct random inspections to determine if respiratory protective equipment is properly selected, used, cleaned, maintained, and stored and communicate findings to IH Section.

b. Preventive Medicine Careline- Occupational Health (OH) and IH Sections will:

(1) The IH program manager will manage the day-to-day operations of respiratory protection program as the Program Administrator. Perform periodic administrative and technical reviews, and conduct worksite evaluations to ensure program compliance with OSHA 29 CFR 1910.134 and this regulation. Provide a copy of findings to appropriate Safety Office (Post and/or DDEAMC). Serve as installation subject matter expert on respiratory protection.

(2) OH will verify that personnel have been medically approved to wear respiratory protective equipment and that it is documented in appropriate medical records. Appendix C (medical screening questionnaire(s)) of 29 CFR 1910.134 shall be used by staff as a baseline medical screening tool and modified as needed. Provide medical follow-up/treatment as required.

(3) IH will approve use of all respirators and verify that personnel are wearing appropriate respiratory protection based on hazard(s) risk assessment and exposure potential and document and provide respirator training to each person required to use respirators as PPE.

(4) IH will in coordination with supervisors and safety managers (Post/EAMC) ensure that supervisors maintain proper documentation to show that breathing air system(s) have been tested for air quality (Grade D or better), when applicable.

(5) IH will train and verify that personnel are appropriately trained and fit tested in accordance with the fit test protocol applicable to hazard in applicable standard(s).

(6) IH will ensure that recommendations are provided to the responsible organization Director/Department Chief/Supervisor to facilitate timely corrective action(s) and track progress.

(7) IH will periodically provide Safety Managers, Occupational Health, and Directorate of Human Resources workplace health hazard(s) information identifying operations which require respiratory protective equipment. Health hazard information will be provided as part of annual IH workplace survey reports. Comprehensive IH survey data will be maintained in the local Defense Occupational Environmental Health Readiness System – IH (DOEHRS-IH) managed by IH Section.

(8) IH will provide training (at least annually) and guidance to all DOD personnel required to use respirators and/or train area specific respirator specialist. Training shall include an orientation to commonly used respiratory protection terms contained in appendix A, this regulation. If requested, provide respirator training to personnel in work area that do not routinely require the use of respirators as PPE to include OSHA appendix D (information, use of respirators when not required) of 29 CFR 1910.134.

(9) IH will conduct random inspections to ensure respirator specialist maintain records of periodic inspections conducted on emergency use respirators to include self-contained breathing apparatus, where applicable.

(10) IH will determine if workers assigned to tasks requiring the use of respirators are physically able to perform work while wearing prescribed respiratory protection.

c. Directorate of Human Resources will:

(1) Refer personnel being considered for employment by supervisors and working in areas/operations requiring the use of respiratory protective equipment to the Occupational Health Clinic for a pre-employment physical examination/medical screening.

(2) In coordination with supervisor(s), re-assign employees working in areas requiring the use of respirators and who are unable to wear PPE due to medical limitation verifiable by Occupational Health in conjunction with IH.

(3) Coordinate with supervisor of areas requiring respiratory protection to ensure, that the use of respirators is identified in DoD personnel job description and is a condition of employment, where applicable.

d. Post Directorate of Public Works and Logistics (DPWL) and EAM Logistics Division will:

(1) Install and maintain breathing air systems capable of providing grade D breathing air or better based on IH guidance, when applicable based in IH worksite assessments.

(2) Maintain compressed air breathing systems alarms in an operable manner.

(3) When applicable, implement a schedule of routine maintenance for servicing and inspecting airline purification panels and changing filters and cartridges as necessary.

e. Directorate of Emergency Services (Military Police Activity) - Fire Protection and Prevention Division:

Will provide initial and annual training on the use of Self Contained Breathing Apparatus (SCBA) to Post firefighters and DoD personnel involved in Hazardous Waste/Emergency Response incidents as directed by IH. Designate two employees as respirator specialist (primary & alternate) to train/perform the following duties as directed by IH:

- (1) Handling, use, and maintenance of SCBAs.
- (2) Respirator selection based on specific contaminant in the atmosphere and the appropriate protection factor to include guidance from IH on selected respirator and cartridge, if applicable.
- (3) Records management.
- (4) Medical and safety aspects of the program.
- (5) Fitting and testing of SCBAs based on duties approved. See Appendix B.
- (6) Mandatory inspections of emergency use respirators and self-contained breathing apparatus and applicable documentation.
- (7) Emergency response actions.

f. Directors/Department Chiefs will:

(1) Ensure a respirator specialist is appointed on orders and trained in accordance with this regulation and guidance from IH Section, when applicable. Ensure site specific SOPs are prepared and periodically updated including all information and guidance necessary for proper selection, use, and care. SOPs will be reviewed during the annual Standard Army Safety and Occupational Health Inspection performed by Safety Office and/or during IH annual DOEHRS-IH workplace survey update(s).

g. Supervisors will:

- (1) Ensure a respirator specialist is appointed IAW this regulation based on IH guidance.
- (2) Ensure that proper respiratory protective equipment is used by employees where required and that employees adhere to the instructions relative to the proper use and maintenance requirements.
- (3) Ensure personnel receive initial and periodic medical monitoring as recommended by the occupational health physician/nurse or his/her designee.
- (4) Ensure facilities for cleaning, maintenance, and proper storage of equipment are provided.
- (5) Ensure workers are individually fit tested by IH Section or site specific respirator specialist.
- (6) Ensure personnel are supplied appropriate respiratory protective equipment as specified by the IH.

(7) Ensure proper respiratory protection is available and utilized by all personnel entering into or working in atmosphere which is considered hazardous to employee's health as identified by health/safety personnel.

(8) Ensure personnel training is documented on Department of Defense (DD) Form 1556 (Request, Authorization, Agreement, Certification of Training and Reimbursement) and that training records are updated at least annually.

(9) Ensure compressed air cylinders are tested and maintained in accordance with manufacturer's inspection guidance and certification requirements.

(10) Ensure breathing air will meet at least the requirements/specification for grade D breathing air and that all certificates of analysis are on file at worksite for review by Safety/IH personnel.

(11) Ensure respirators are maintained in accordance with manufacturer's instructions. Respirators used by more than one person shall be thoroughly cleaned and disinfected after each use.

h. Respirator specialist (currently, duties limited to designated personnel on order in Post Fire Department) will:

(1) Train DA personnel requiring respiratory protective equipment based on guidance from IH staff. Document training using DD Form 1556 or equal. Provide copy of completed training form to IH Section as required in Appendix B.

(2) Performs initial fit testing and provides annual refresher training under the direction of IH staff. Fit testing will not be done until personnel have been medically screened/cleared by the occupational health.

(3) Repair respirators using only authorized parts in accordance with specific manufacturer's test and certification requirements if trained and authorized or return unit(s) to authorized repair facility.

(4) Coordinate with IH Section for monitoring the breathing air quality for air-supplied respirator replenishing systems and perform quality assurance evaluations (at least annually for oil less compressors and quarterly for other compressors to be used for grade D air), if required. Maintain SCBAs in accordance with manufacturer's guidance, if used. Perform monthly documented inspections of SCBAs as required in 29 CFR 1910.134(h)(3).

(5) Function as the central point of contact for worksite specific equipment maintenance records.

(6) Issue respirators and respirator user cards where applicable based on IH guidance. NOTE: DD Form 1556 or equal will satisfy this requirement.

(7) Maintain necessary inventory levels of respirators, accessories, and spare parts, if required by IH Section.

i. Respiratory equipment users will:

(1) Wear the equipment in accordance with this regulation without variance.

(2) Inspect the respirator(s) before each use:

(a) Inspections will include a visual parts check of headbands, masks, and valves for deterioration. Ensure the respirator has no holes, cracks, leaks, or other obvious defects.

(b) Perform fit tests/check as instructed by IH staff or respirator specialist.

(3) Notify immediate supervisor if it is suspected that respiratory protective equipment is needed or that the respirator is defective.

(4) Adhere to instructions governing the proper use, maintenance, and storage practices of the respirator.

(5) Store respirators under conditions which will protect against dust, sunlight, deformation, and other environmental conditions.

APPENDIX A

COMMONLY USED TERMS USED IN RESPIRATORY PROTECTION

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

Assigned protection factor (APF).

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.

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

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

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

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

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 face piece composed of the filtering medium.

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

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

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

High efficiency particulate air (HEPA) filter. A filter that is at least 99.97 percent 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.

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

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

Interior structural firefighting. The physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage.

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

Maximum use concentration (MUC).

Negative pressure respirator (tight fitting). A respirator in which the air pressure inside the face piece is negative during inhalation with respect to the ambient air pressure outside the respirator.

Oxygen deficient atmosphere. An atmosphere with oxygen content below 19.5 percent 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 by paragraph (e) of 29 CFR 1910.134.

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

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

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

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.

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

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

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

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

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

User sea/check. An action conducted by the respirator user to determine if the respirator is properly seated to the face.

Appendix B

MCHS-PMS-IH (40-5e)

MEMORANDUM FOR RECORD, Directorate of Emergency Services (Military Police Activities), Fire Protection and Prevention Division, ATTN: Fire Chief, USASC&FG, Fort Gordon, GA 30905-5000

SUBJECT: Approval to Use Quantitative Fit Testing Procedures for Fire Department Personnel

1. Authority. USASC&FG Regulation 40-8, Respiratory Protection Program, 15 October 1999.
2. Reference. 29 Code of Federal Regulations (29 CFR) Part 1910.134 – Respiratory Protection, the Department of Labor, Occupational Safety and Health Administration (OSHA), December 2008
3. Approval. Provisional approval to use quantitative fit testing for subject personnel is hereby continued. Approval will remain in effect so long as Chief, Fire Protection and Prevention ensures the following conditions are satisfied:
 - a. Provide full names of at least two employees (primary & alternate) to serve as “Respirator Specialist” (RS) within the Fire Protection and Prevention. Incorporate tasks specific duties for RS under the direction and guidance of installation Respirator Program Administrator (Chief, Industrial Hygiene) as additional duty.
 - b. Ensure that respirator specialists are appointed on official orders with additional detail in respiratory protection accordance with USASC&FG Reg. 40-8.
 - c. Continue to fund, maintain calibration(s), operating manuals, and all required supplies for quantitative fit test unit used for Fire Protection and Prevention. Current unit in use is TSI Incorporated PortaCount Plus Model 8020.
 - d. Provide Chief, Industrial Hygiene a copy of annual certificate of calibration for equipment, summary of all fit test results within 30 days upon completion of each test, and maintain log of equipment trouble/repairs.
 - e. Provide Industrial Hygiene access to random inspection of quantitative fit test records/tasks, when requested.
4. Point of contact is the undersigned at 787-1214.

George S. Pruiett
Administrator, Respiratory Protection Program
Preventive Medicine Care line

CF:
C, PMS
C, Post Safety

(ATZH-HS)

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