DEPARTMENT OF THE ARMY U.S. ARMY GARRISON FORT BELVOIR Fort Belvoir, Virginia 22060-5928

FB Regulation 385-3

15 July 1998

Safety RESPIRATORY PROTECTION PROGRAM

FOR THE COMMANDER:

DISTRIBUTION:

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History. This publication was last printed on 10 June 1996. This printing publishes changes made since that date.

Summary. This is a revised regulation. It establishes policies and procedures for respiratory protection equipment selection, use, training, medical, and maintenance various requirements.

Applicability. This regulation applies to all civilian and military personnel at Fort Belvoir, including tenant activities whose duties involve potential exposure to hazardous materials and require the use of respiratory protective equipment (RPE).

Suggested Improvements. The proponent of this regulation is the Directorate of Installation Support, US Army Garrison Fort Belvoir. Users are invited to send comments and suggested improvements on DA Form 2028, Recommended Changes to Publications and Blank Forms to Directorate of Installation Support, 9430 Jackson Street, Suite 107, Fort Belvoir, Virginia 22060-5130

^{*}This regulation supersedes USAFB Regulation 385-3, dated 10 June 1996.

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1. PURPOSE.

- a. To establish policies and procedures to ensure all airborne health hazards in the work environment are identified and proper protective measures and controls are established and followed to minimize or eliminate the effects of the safety and health hazards.
- b. Provides local procedures for implementing and maintaining a respiratory protection program which is consistent with the Occupational Safety and Health Act (OSHA) and Department of the Army (DA) standards and guidelines, and delineates responsibilities.
- 2. Applicability. This respiratory protection program (RPP) applies to all civilian and military personnel working at Fort Belvoir, which includes tenant activities, whose duties involve potential exposure to hazardous materials and require the use of respiratory protective equipment (RPE).

3. POLICY.

- a. The policy of this headquarters is that RPE is designed to protect personnel from airborne environmental contaminants and will be used only when there are no feasible engineering controls that can be used to reduce or eliminate hazardous exposures to employees. Additionally, areas and operations requiring RPE will have the airborne contaminant evaluated at least annually.
 - b. RPE will be used only under the following conditions:
- (1) When engineering or work practice controls are not adequate to control the hazard, or during interim periods when engineering controls are being designed, funded, procured, or installed.
- (2) During intermittent, non-routine operations (less than one (1) hour a day for one (1) day a week).
 - (3) During emergencies.
- (4) When required by other federal regulations or operating licenses.
- c. Workers will not be assigned tasks requiring the use of respirators without prior medical evaluation.
- d. Only approved RPE, as defined in the Glossary, will be used at Fort Belvoir for industrial respiratory protection.
 - e. Wearing of contact lenses with a respirator is not allowed.
- f. The military protective mask will not be worn in industrial operations.
- g. Respirators will not be worn when there is growth of excessive facial hair such as beards or sideburns.

4. RESPONSIBILITIES.

- a. Installation Commander will:
- (1) Establish an Installation Respiratory Protection Program.

- (2) Provide sufficient funds, facilities, and qualified personnel to effectively and efficiently perform all duties required by the Respiratory Protection Program.
- (3) Appoint an Installation Respiratory Protection Officer (IRPO).
 - b. Installation Medical Authority (IMA) will:
- (1) Coordinate with the designated Safety and Occupational Health Office to:
- (a) Provide direction to the IRPO to plan, program, and annually evaluate the installation's Respiratory Protection Program.
- (b) Coordinate with IRPO to prepare a local implementing regulation prescribing the installation Respiratory Protection Program.
- (c) Provide guidance to supervisors in the preparation of a standing operating procedure (SOP) on respirator use in their particular work area.
- (d) Approve or disapprove entry into an immediately dangerous to life or health (IDLH) environment (including confined spaces).
 - (e) Provide training and guidance to the IRPO.
- (f) Perform worksite inspections to determine the type of respiratory protection best suited for the task involved and maintain appropriate surveillance of area work conditions and degree of employee exposure.
- (g) Conduct inspections and evaluations of the Respiratory Protection Program according to 29 CFR 1910.139 and TB Med 502/DLAM 1000.2 and record any deficiencies.
- (h) Coordinate with IRPO to designate the type of Respiratory Protection Equipment (RPE) to be purchased or used.
- (i) Coordinate with the DIS, Fire Protection & Safety Division (FPSD) supervisor to provide training to firefighters using RPE.

- (2) Perform medical evaluations of workers to:
- (a) Determine if workers assigned to tasks requiring the use of respirators are physically, psychologically, and physiologically able to perform work while wearing prescribed respiratory protection.
- (b) Inform supervisors as to whether each employee is able to wear respiratory protection and perform work required, and coordinate with the Civilian Personnel Advisory Center (CPAC) and IRPO when necessary.
 - (c) Review worker's medical status annually.
- (3) Perform fitting for corrective lenses inside full facepiece respirators to ensure proper vision and good fit.
 - c. Civilian Personnel Advisory Center (CPAC) will:
- (1) Provide support to supervisors, the IRPO, IMA, and other individuals responsible for administering the Respiratory Protection Program requirements.
- (2) Ensure that all job descriptions, as identified by the IRPO, specify that RPE may be required and the use of such equipment requires the employee to successfully pass a physical examination by the IMA.
- (3) Assure that vacancy announcements include respiratory protection requirements.
- (4) Refer personnel being considered for employment or assignment in areas requiring the use of RPE to the Occupational Health Section of Preventive Medicine for a pre-placement physical evaluation.
- (5) Evaluate for appropriate action all employees presently working in areas requiring RPE who are disqualified because they are unable to wear the required protective clothing or equipment.

- d. DIS, Logistics Division will:
- (1) Ensure request for RPE are approved by the IRPO prior to accepting and/or processing requisitions.

NOTE: The IRPO's approval, and the model number, size, TC number, and manufacturer of the RPE will be indicated on the Respiratory Protection Request Form (Appendix A), and will be attached to the request.

- (2) Obtain only approved RPE and parts as specified by the IRPO.
 - (3) Provide procurement of RPE and parts when necessary.
 - e. MDW Acquisition Center will:
 - (1) Only procure RPE that is approved by the IRPO.
- (2) Obtain only approved RPE and parts as specified by the IRPO.

NOTE: The IRPO's approval, and the model number, size, TC number, and manufacturer of the RPE, will be indicated on the Respiratory Protection Request Form (Appendix A), and will be attached to the request.

- (3) Provide procurement of RPE and parts when necessary.
- f. DIS, Fire Protection and Safety Division will:
- (1) Provide training for fire fighters using RPE in coordination with the IMA and the IRPO. Conduct individual fit testing annually. Comply with NFPA STD. 1981.
- (2) Provide assistance to the IRPO when training or technical advice is necessary for emergency RFE use.
- (3) Provide assistance and/or support in situations where SCBA would be required to enter a contaminated atmosphere.
- (4) Approve the issuing of all emergency use RPE in coordination with the IMA and the IRPO. Provide direction to the IRPO to plan, program, and annually evaluate the installation's RPP.

- g. DIS, Fire Protection & Safety Div, Safety Branch will:
- (1) Provide guidance to the IRPO about whether the installation respirator specialist position should be full or part-time.
- (2) Coordinate with the IRPO to prepare a local implementing regulation prescribing the installation RPP.
- (3) Provide guidance to supervisors in the preparation of a standing operating procedure (SOP) on respirator use in their particular work area.
- (4) Approve or disapprove entry into IDLH environment (including confined spaces).
- (5) Perform worksite inspections to determine the type of respiratory protection best suited for the task involved.
- (6) Conduct inspections and evaluations of RPP and record any deficiencies.
- (7) Conduct random inspections to determine if RPE is properly selected, used, cleaned, maintained, stored, and disposed of.
- (8) Coordinate with the IRPO to designate the type of RPE to be purchased or used.
- (9) Coordinate with the FPSD supervisor to provide training to firefighters using RPE.
- (10) Provide sufficient funds, facilities, and qualified personnel to effectively perform all duties required by the RPP.
 - h. The Respirator User will:
- (1) Be familiar with local respiratory protection regulations and worksite SOPs.
- (2) Only use the respirator(s) for which he/she has approval to use, as stated on the Fort Belvoir Form 380, Respiratory Protection Request Form (Appendix A) and Fort Belvoir Form 381, RPE User Card (Appendix F). These forms may be obtained from the Safety Office at 9701 Gunston Road, building 191.

- (3) Use respirators and RPE according to instructions and training received.
- (4) Perform positive and negative pressure fit test techniques to ensure a satisfactory fit is obtained each time the respirator is used.
- (5) Perform primary inspection, maintenance, cleaning, and disinfecting of assigned RPE.
- (6) Notify immediate supervisor of a nonfunctional respirator and if it is suspected that respiratory protection or additional RPE is needed.
- (7) Complete and sign the employee section of the Fort Belvoir Forms 380 and 381.

i. Supervisors will:

- (1) Ensure that SOPs are developed for RPE user and approved by the IRPO prior to the publication of the SOP and before RPE is used. Appendix E provides an outline of the basic elements required in the SOP.
- (2) Ensure that alternate methods to control or remove the hazard, for which RPE is being used, has been formally addressed and work orders, as necessary, are submitted.
- (3) Complete and sign the Supervisor section of the Fort Belvoir Forms 380 for each employee required to wear RPE and schedule the employee for the required medical evaluation, respiratory protection training, and fit testing.
- (4) Ensure all personnel, to include new, transfer, temporary, and/or summer hire employees, who require the use of RPE, have been successfully cleared by the IMA and the IRPO prior to permitting the employee to use a respirator or work in an area requiring RPE.
- (5) Ensure only approved RPE, as specified on the Fort Belvoir Form 380, Respiratory Protection Request Form (Appendix A) and Fort Belvoir Form 381, RPE User Card (Appendix F) is used by employees when RPE is required, and employees adhere to the instructions relative to the proper selection, use and maintenance requirements of the RPP.

- (6) Enforce the provisions of this regulation and familiarize their workers on the applicable SOPs for RPE use.
- (7) Ensure RPE (masks, air lines, compressors, filters, alarm systems, etc.,) is fully operable, and is used within the manufacturer's recommended guidelines and limitations.
- (8) Establish and implement a procedure to have the breathing air quality for supplied air and SCBA RPE monitored quarterly, and ensure the quality of air conforms to Grade D or better.
- (9) Ensure RPE is stored in a clean condition and sanitary location within the work center, and protected from dust, sunlight, extreme temperatures, excessive moisture, or damaging chemicals, when not in use.
- (10) Ensure conditions do not exist (i.e., growth of beard, other facial hair, skullcaps or eye wear that projects under the face pieces or absence of one or both dentures) which will prevent the RPE from providing a good face-to-face seal.
- (11) Prohibit workers from performing tasks that require RPE when adequate respiratory protection is not available and when an effective face fit cannot be obtained.
- (12) Ensure that all corrective spectacles, eye protection, hearing protection, or other personal protective equipment does not affect the proper fit of the RPE.
- (13) Provide supplemental safety equipment and precautions such as additional RPE, lifelines, emergency rescue equipment and standby personnel whenever required and IAW 29 CFR 1910.134.
- (14) Submit a copy of Fort Belvoir Form 380, Respiratory Protection Request Form (Appendix A) to the IRPO for approval.
- (15) Ensure that all respirators that are assigned for the exclusive use of one worker are adequately identified with the worker's name or initials.
- (16) Ensure that proper respirator maintenance and cleaning is conducted at frequent (at least weekly) intervals.

- (17) Maintain records of RPE training, fit testing, and medical monitoring for each employee under his/her supervision.
 - (18) Ensure all nonfunctional RPE is removed from service.
- (19) Receive training and become familiar and knowledgeable of the maintenance, cleaning, disinfecting, and limitations of the RPE in their areas of responsibility.
- (20) Ensure proper use of RPE is included as a critical element in the employee's job performance appraisal when the use of RPE is required.
- (21) Post RPE warning signs in the areas where the use of RPE is required.
- (22) Inspect emergency use respirators and SCBA monthly in coordination with the IRPO, and maintain the records.
- (23) Ensure respirator users receive initial and annual fit testing and training.
- (24) Ensure users receive additional fit testing whenever a different respirator facepiece is used and when there is a change in the employee's physical condition that may affect respirator protection effectiveness.
 - j. DIS, Director of Installation Support will:
- (1) Ensure airline couplings for breathing air systems are incompatible with outlets for other gas systems.
- (2) Ensure breathing air systems, capable of providing Grade "D" air where required, are installed and maintained as necessary in accordance with US Navy standards and NFPA standards.
- (3) Ensure airline purification panels are serviced and inspected, and filters and cartridges are changed as necessary.
- (4) Provide the facilities and maintenance necessary to support a comprehensive respiratory protection program (i.e., building adequate respirator storage compartments, preventive maintenance of breathing air systems, etc.).

- (5) Establish a written agreement, with the contractors who perform work on or for Fort Belvoir, ensuring the contractor provides and uses adequate respiratory protective equipment in accordance with OSHA regulations.
 - k. Installation Respiratory Protection Officer (IRPO) will:
- (1) Plan, program, and annually evaluate the installation RPP with assistance from the designated Safety and Occupational Health Manager and the IMA.
- (2) Prepare a local implementing regulation prescribing the installation RPP in coordination with the designated Safety Officer and the IMA.
- (3) Approve any SOP prepared for respirator use before it is published.
- (4) Coordinate with the designated Safety and Occupational Health Officer and IMA about type of RPE or replacement parts to be purchased or used.
- (5) Initiate prompt corrective action on deficiencies detected in RPP.
- (6) Ensure that affected employees receive effective respiratory protection training.
 - (7) Perform required fit testing IAW 29 CFR 1910.
- (8) Ensure that respirators are repaired using only designated parts per training and authorization.
- (9) Issue respirators and respirator user cards after determining that all requirement for medical evaluations, training, and fit testing are met.

5. REFERENCES.

- a. Title 29 CFR 1910.139, Respiratory Protection.
- b. ANSI Z88.2-1980, Practices for Respiratory Protection.
- c. ANSI Z86.1-1992/CGA Specification G-7.1, Commodity Specifications for Air.
- d. AR 11-34, The Army Respiratory Protection Program, 15 Feb 1990.
 - e. AR 385-10, The Army Safety Program, 23 May 88.
 - f. TB-MED 503, The Army Industrial Hygiene Program.
- g. 42 CFR 84, (Cartridge Certification Standard for Particulates).
- h. NFPA Standard 1981, Open Circuit Self Contained Breathing Apparatus for Fire Fighters 1992 Edition.
 - i. MIL STD 810-E, Environmental Test Methods, 14 July 1989.
- j. NFPA Standard, 1500 Occupational Safety and Health 1992 Edition.

APPENDIX A

F	RESPIRATORY PR	OTECTI	ON REQUEST	
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COMMENTS/REASON FOR NON	FIT TEST MET	HOD		
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IRS SIGNATURE				
			DATE .	
	EMPLOYEE S	CECTION		
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I HAVE BEEN TRAINED AND FIT	TESTED AND UNDERSTAND	O ALL THE P	ROCEDURES DISCUSSED.	
EMPLOYEE'S SIGNATURE			DATE	
DISTRIBUTION OF COPIES:	1-IRS		3-EMPLOYEE	
	2-OCCUPATIONAL HEA	ALTH	4-SUPERVISOR	İ

FB FORM 380, Sep 91 (Rev) Previous edition dated 1 Jan 89 is obsolete -A-1

APPENDIX B

QUALITATIVE FIT TEST PROCEDURE FOR HALF-MASK AND FULL FACEPIECE NEGATIVE PRESSURE RESPIRATORS

- 1. Trainee receives an orientation and training on respiratory protection as outlined in the respiratory protection training procedure (Appendix G).
- 2. Trainee will be allowed to smell a weak sample of the irritant smoke before the respirator is donned.
- 3. Trainee will dons a negative pressure respirator of the same make, model, style, and size that will be worn in the work environment.
- 4. Trainee conducts a positive and negative pressure fit check to ensure donning was correct. The trainee readjusts the respirator as needed to obtain an initial fit.
- 5. A visual inspection is done by the instructor to screen for proper fit, and correct placement of mask and head straps on the trainee.
- 6. A qualitative fit test is conducted by the instructor as follows:
- a. The trainee is instructed to keep his/her eyes closed as irritant smoke is generated around the sealing surface of the respirator using ventilation smoke tubes.
- b. The trainee is instructed to breathe normal and move his/her head up and down, from side to side, talk aloud and slowly read the Rainbow Passage while the smoke is generated.
- c. If the trainee indicates detection of the smoke, the mask is readjusted and the fit is retested. If an indication of a leak is still detected, a new mask of a different manufacture and/or size is donned and the irritant smoke leak test is repeated until no leak is detected. NOTE: Isoamyl acetate smoke (banana oil) may be used in place of the irritant smoke. However, not all employees will detect or admit they detect the sweet smell of the banana odor. Therefore, irritant smoke will be the first choice for fit testing of RPE users.

APPENDIX C

MAINTENANCE AND CARE OF RESPIRATORY EQUIPMENT PROCEDURES

The individual is responsible for primary maintenance and care of his/her RPE. Where respirators are used collectively or kept ready for emergencies by a shop or operating activity, the supervisor of the work area is responsible for establishing a respirator maintenance, cleaning, and disinfecting program. This program will be adjusted for the number of types of respirators in use, working conditions, and hazards involved. This program shall also include these basic services:

- a. Inspection for Defects.
- b. Cleaning and Disinfecting.
- c. Repair and Storage.
- d. Maintained to Retain its Original Effectiveness.
- 1. All RPE shall be inspected routinely before and after each use. RPE that is not routinely used but kept ready for emergency use shall be inspected after each use and at least monthly to ensure that it is in satisfactory working condition.
- 2. Self-Contained Breathing Apparatus shall be inspected at least monthly. Air cylinders shall be fully charged according to the manufacturer's instructions. Additionally, it shall be determined that the regulator and warning devices function properly at the time of the inspection.
- 3. RPE inspection shall include a check of the tightness of connections and the condition of the facepiece, headbands, valves, connecting tubes, and canisters. Rubber or elastomers parts shall be inspected for pliability and signs of deterioration (i.e., stress cracks. dryness, etc.). Stretching and manipulating rubber or elastomers parts with a massaging action will keep them pliable and prevent them from hardening or stiffening during storage. RPE that does not pass inspection will be taken out of service and properly repaired in accordance with the manufacturer's standards, or replaced.

- 4. The user activity shall keep a record of inspection dates, findings, and corrective actions for respirators maintained for emergency use.
- 5. Respirators issued to specific individuals shall be cleaned and disinfected as frequently as necessary to ensure that skin penetrating and dermatitis causing contaminants are removed from respirator surfaces. Respirators maintained for emergency use or used by more than one person shall be cleaned and disinfected after each use.
- a. The following procedure is recommended for cleaning and disinfecting respirator facepieces:
 - (1) REMOVE ANY FILTERS, CARTRIDGES, CANISTERS, OR HOSES.
- (2) WASH FACEPIECE AND ANY BREATHING TUBES IN A CLEANER-DISINFECTANT SOLUTION. A SOFT BRUSH MAY BE USED TO FACILITATE DIRT REMOVAL.
 - (3) RINSE COMPLETELY IN CLEAN, WARM WATER.
 - (4) AIR DRY IN A CLEAN AREA.
- (5) CLEAN OTHER RESPIRATOR PARTS AS RECOMMENDED BY THE MANUFACTURER.
- (6) INSPECT VALVES, HEAD STRAPS, AND OTHER PARTS: REPLACE DEFECTIVE PARTS WITH NEW ONES.
- (7) INSERT NEW FILTERS, CARTRIDGES, OR CANISTERS PERIODICALLY AS SPECIFIED BY THE MANUFACTURER. MAKE SURE SEALS ARE TIGHT AND THREADS ARE NOT CROSS-THREADED.
- (8) PLACE IN CLEAN PLASTIC BAG OR OTHER IMPERMEABLE AND SEALABLE CONTAINER FOR STORAGE.
- b. Cleaner-disinfectant solutions should be commercially prepared solutions, which are followed by a clean, warm water Rinse and air-dried.
- c. Other cleaning and disinfecting solutions or solvents can, over a period of time, damage RPE parts by aging the rubber or corroding the metal parts. Solvents, except for occasional use

of isopropyl or ethyl alcohol should be avoided. Additionally, temperatures above 185 degrees F., and vigorous mechanical agitation should also be avoided.

- d. Respirators contaminated with organic phosphate pesticides should be decontaminated by an alkaline soap wash and a 50 percent isopropyl and/or ethyl alcohol and 50 percent water rinse, followed by the normal cleaning procedure.
- 6. Replacement of parts or repair of RPE shall be done only by experienced personnel. Using repair parts, other than those specifically designed for repair of the specific RPE, invalidates the RPE's approval. No attempt shall be made to replace components or to make adjustments beyond the manufacturer's recommendations. Reduction or admission valves or regulators shall be returned to the manufacturer or to a trained and authorized technician for adjustment or repair.

7. Respirator storage shall be as follows:

- a. After inspection, cleaning, sanitation, and any necessary repair, respirators shall be stored to protect against dust, sunlight, extreme temperatures, excessive moisture, or damaging chemicals and other contaminants. Respirators should not be stored in such places as lockers or tool boxes unless they are in containers or cartons that protect them from being disfigured. Respirators placed at stations and work areas for emergency use should be stored in compartments built for that purpose, and clearly marked to indicate the content, and must be quickly accessible at all times.
- b. Respirators shall be packed or stored so the facepiece and exhalation value will not be damaged or disfigured by being subjected to crushing or cramping.
- c. Instructions for proper storage of emergency RPE, such as gas masks and SCBA, are found in the USE AND CARE section of the manufacturer's instructions and are usually mounted inside the carrying case lid.

APPENDIX D

BASIC ELEMENTS FOR A STANDARD OPERATING PROCEDURE (SOP)

Written Standard Operating Procedures shall be developed by the organization requiring RPE and approved by the IRPO. The procedures will establish the necessary information to obtain, use, and maintain adequate RPE in the work area. The SOP will be received by employees prior to issuing them RPE, and copies of the SOP will be available for employees to review at other times. The SOP procedures shall include the following information as a minimum:

- a. Training of RPE users and their supervisors.
- b. Positive and pressure fit tests.
- c. Requirement for obtaining RPE.
- d. Cleaning and disinfecting RPE.
- e. Storage of RPE.
- f. Inspection and maintenance of RPE.
- g. Selection, limitations, and capabilities of RPE.
- h. Proper fitting, donning, wearing and removing.
- i. Review of Fort Belvoir's Respiratory Protection Program.
- j. How to deal with emergency situations involving use of RPE.

APPENDIX E

RESPIRATORY PROTECTION TRAINING PROCEDURE

Selecting appropriate RPE for a given hazard is important, but equally important is the correct use of the selected RPE. Proper use of such equipment can be ensured by carefully training the users of RPE and the user's supervisors in the selection, use, and maintenance of the selected RPE. Therefore, the following topics, as a minimum, will be presented by the Installation Respiratory Protection Officer (IRPO) to supervisory and non-supervisory personnel during their respiratory protection training.

- 1. The structure and operation of the entire respirator program.
- 2. The legal requirements pertinent to the use of respirators in their respective situations.
- 3. The nature of the respiratory hazard, its extent (whether acute, chronic, or both), and an appraisal of what may happen if the respirator is not used.
- 4. Explanation of why more positive engineering or administrative controls are not immediately feasible and why the use of RPE is required.
- Explanation of why a particular respirator has been selected.
- 6. Discussion of the respirator's capabilities and limitations.
- 7. Instruction, training, and practice in the actual use of the respirator.
- 8. Discussion of how to recognize and handle emergencies.
- 9. Proper fitting techniques and testing of facepiece-to-face seal.
- 10. The need for and frequency of respirator inspection, cleaning, disinfecting, and maintenance.
- 11. Proper storage techniques to protect the RPE against dust, sunlight, heat, extreme cold, excessive moisture, damaging chemicals, and mechanical damage.

APPENDIX F

ENVIRONMENTAL/RESPIRATORY PROTECTION FITNESS CERTIFICATE

ENVIRONMENTAL/RESPIRATORY PROTECTION FITNESS CERTIFICATE (FB Reg 385-3)				
NAME	DATE ISSUED	DATE EXPIRES		
is physically qualified to wo conditions Limitations	rk under extreme er	nvironmental		
MEDICAL DIRECTOR (Signature)		DATE		
EMPLOYEE (Signature)		DATE .		

() Respiratory Protective Equipment User Ca	rd	
Type of Respirator & TC Number		
	-	
Respirator Specialist (Signature)	Date	

GLOSSARY

SECTION I ABBREVIATIONS

ANSIAmerican National Standards Institute
ARArmy Regulation
CFRCode of Federal Regulations
CGACompressed Gas Association
DADepartment of the Army
FDFire Department
IDLHImmediately Dangerous to Life or Health
IHIndustrial Hygienist
IMAInstallation Medical Authority
IRPOInstallation Respiratory Program Officer
DISDirectorate of Installation Support
ISOInstallation Safety Office
MSHAMine Safety and Health Administration
NIOSHNational Institute for Occupational Safety and Health
OSHAOccupational Safety and Health Administration
RPERespiratory Protective Equipment
RPPRespiratory Protection Program
SCBASelf-Contained Breathing Apparatus
SOPStandard Operating Procedure

GLOSSARY 1

GLOSSARY

SECTION II Abbreviations

APPROVED RPE

Tested and listed as satisfactory according to standards established by a competent authority (such as National Institute for Occupational Safety and Health, Mine Safety and Health Administration) to provide respiratory protection against the particular hazard for which it is designated. For military agent protection, the Department of the Army and Department of Defense are the approval authorities.

CONFINED SPACES

Refers to a space which by design has limited openings for entry and exit, unfavorable natural ventilation which could contain or produce dangerous air contaminants, and which is not intended for continuous employee occupancy. Confined spaces include, but are not limited to, storage tanks, compartments of ships, process vessels, pits, silos, vats, degreasers, reaction vessels, boilers, ventilation and exhaust ducts, sewers, manholes, tunnels, underground utility vaults, and pipelines.

CONTAMINANT

A harmful, irritating, or nuisance material in concentrations exceeding those normally found in the ambient air.

DISINFECTING

The destruction of pathogenic organisms, especially by means of chemical substances.

EMERGENCY

An unplanned event when a hazardous atmosphere of unknown chemical or particulate concentration suddenly occurs, requiring immediate use of a respirator for escape from or entry into the hazardous atmosphere to carry out maintenance or some other task.

NOTE: This may or may not include cleanup, maintenance, or repair in unknown concentrations or oxygen deficient atmospheres.

Glossary 2

SECTION II Terms

EMERGENCY RESPIRATORY USE SITUATION

A situation that requires the use of respirators due to the unplanned penetration of a hazardous atmosphere (often of unknown composition) caused by an accident, mechanical failure, or other means that requires evacuation of personnel or immediate entry for rescue or corrective action.

EVACUATION OR ESCAPE

An unplanned event when a hazardous atmosphere of unknown chemical or particulate concentration suddenly occurs, requiring immediate use of a respirator for exiting the area only. NOTE: This DOES NOT include cleanup, maintenance, or repair in unknown concentrations or oxygen deficient atmospheres.

FIT TEST

A procedure used to determine how well or how poorly a respirator fits an individual's face. This procedure can involve qualitative fitting techniques by using irritant fume, isoamyl acetate, or a saccharin solution aerosol, or quantitative fitting procedures using a corn oil aerosol.

IMMEDIATELY DANGEROUS TO LIFE OR HEALTH (IDLH)

A condition posing an immediate threat to life or health, or an immediate threat of severe exposure to contaminants likely to have adverse delayed effects on health. This condition includes atmospheres where oxygen content by volume is less than 16 percent.

INSTALLATION MEDICAL AUTHORITY

Installation Medical Authority is the unit surgeon, Command Chief Surgeon, U.S. Army Medical Department Activity, U.S. Army Medical Center Commanders, and the Director of Health Services or his designated representative responsible for provision of medical support at the unit, command, or installation concerned. At Fort Belvoir, Virginia, this individual is the Chief, Occupational Health, Preventive Medicine Services, DeWitt Army Community Hospital.

Glossary 3

SECTION III Special Abbreviations and Terms

INSTALLATION RESPIRATORY PROGRAM OFFICER

An individual appointed by the Installation Commander who is responsible for establishing, maintaining, coordinating, and directing the Respiratory Protection Program.

INSTALLATION SAFETY AND OCCUPATIONAL HEALTH OFFICER

Principal staff advisor, technical consultant and coordinator to the command and the staff in planning, organizing, directing, and evaluating all installation safety program elements (AR 385-10).

OXYGEN DEFICIENT ATMOSPHERE

An atmosphere containing 19.5 percent or less oxygen by volume. A situation in which respiratory devices are required in order to provide adequate respiratory protection to workers entering an area where the contaminant concentration is above the IDLH level or is unknown.

RESPIRABLE AIR

Air supplied to a respiratory protective device that meets air purity standards for specific work environments. For example, Grade D air, or better, is required for personnel entering an IDLH atmosphere.

RESPIRATOR

An approved device designed to provide the user with respiratory protection against inhalation of airborne contaminants and, for some devices, oxygen deficient atmospheres.

RESPIRATORY PROTECTIVE EQUIPMENT

Parts of a respirator, or a respiratory protection system (i.e., face mask, head straps, air lines/hoses, air compressors, compressed air bottles, air filtering devices, fittings, etc.) that provides respirable air to a worker requiring respiratory protection and is divided into the following categories:

Glossary 4

SECTION III

AIR PURIFYING RESPIRATORS:

Particulate removing mechanical filter.

Gas and vapor removing chemical filter.

Combination particulate removing, and gas or vapor removing filter.

ATMOSPHERE SUPPLYING RESPIRATORS:

Supplied air: Airline respirator.

Demand regulator or pressure demand regulator.

Continuous flow respirator.

Hose Mask: With or without blower.

Self-Contained Breathing Apparatus (SCBA). Pressure demand regulator.

COMBINATION AIR PURIFYING AND ATMOSPHERE SUPPLYING.

COMBINATION SUPPLIED AIR AND SELF-CONTAINED BREATHING APPARATUS.

SERVICE LIFE

The length of time required for an air-purifying element to reach a specific effluent concentration. Service life is determined by the type or substance being removed, the concentration of the substance, the ambient temperature, the specific element being used (cartridge or canister), the flow rate resistance, and the selected breakthrough value. The service life for a Self-Contained Breathing Apparatus (SCBA) is the period of time, as determined by the NIOSH certification test, in which adequate breathing gas is supplied.