DEPARTMENT OF THE ARMY
U.S. ARMY MILITARY DISTRICT OF WASHINGTON
FORT LESLEY J. MCNAIR, DC 20319-5058

MDW Regulation
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Safety
RESPIRATORY PROTECTION PROGRAM

FOR THE COMMANDER:

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DISTRIBUTION:
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OFFICIAL:

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History. This is a new regulation.

Summary. This regulation prescribes policy, procedures, and responsibilities for the establishment and implementation of a Respiratory Protection Program within the U.S. Army Military District of Washington (MDW). It further establishes the MDW Safety Office as the major Army command (MACOM) proponent and authority for this program.

Applicability. This regulation applies to staff principals, subordinate commands, installations, and activities of MDW as well as tenant activities assigned to or supported by MDW.

Supplementation. This regulation may be supplemented at the installation level. Proposed supplements must be submitted for approval to Commander, MDW, ATTN: ANOS, 103 Third Avenue, Fort Lesley J. McNair, DC 20319-5058.

Suggested improvements. The proponent of this regulation is the MDW Safety Office. Users are invited to send comments and suggested improvements on DA Form 2028 (Recommended Changes to Publications and Blank Forms) to Commander, MDW, ATTN: ANOS, 103 Third Avenue, Fort Lesley J. McNair, DC 20319-5058.

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1. Purpose

This regulation is established to implement a Respiratory Protection Program within the U.S. Army Military District of Washington (MDW). It prescribes the policies and procedures necessary to ensure that affected personnel are protected against unnecessary exposure to airborne concentrations of air contaminants and toxic materials equal to or greater than the permissible exposure levels (PELs) established by federal guidelines.

2. References

Required and related publications are listed in appendix A.

3. Explanation and abbreviation of terms

Abbreviations and terms used in this regulation are explained in the glossary.

4. Responsibilities

a. The MDW Safety Director will provide overall policy guidance and oversight for the respiratory protection program.

b. Commanders will--

(1) Establish and implement a respiratory protection program in accordance with 29 CFR, Part 1910.134 (to include appendixes), AR 11-34, AR 40-5, and this regulation. Implementation of this program will require the coordinated efforts of commanders, supervisors, safety, medical, industrial hygiene, and procurement personnel as well as civilian personnel specialists.

(2) Appoint a Respiratory Protection Program Administrator. This individual must be qualified by appropriate training or experience that is commensurate with the complexity of the program to administer or oversee the respiratory protection program and conduct the required evaluations to determine program effectiveness.

(3) Identify medical personnel to perform medical evaluations and/or examinations as required by appendix C of 29 CFR, Part 1910.134, AR 11-34, AR 40-5, and this regulation. **(NOTE: For the purposes of this regulation, the term "installation medical authority (IMA)" will be used to define medical personnel (i.e., occupational health nurse, physician, etc.) appointed by commanders responsible for performing the medical duties outlined in this regulation).**

(4) Ensure respiratory protective equipment, training, and medical evaluations/examinations are provided at no cost to the employee.

(5) Provide sufficient resources to manage an effective respiratory protection program.

c. Respiratory Protection Program Administrator will--

(1) Plan, program, and evaluate the respiratory protection program.

(2) Review and approve standing operating procedures (SOPs) prepared by supervisors prior to publication and distribution.

(3) Initiate prompt corrective action to correct deficiencies detected in the respiratory protection program.

(4) Establish procedures for return and repair of damaged and/or defective respirators.

(5) Ensure records are maintained in accordance with procedures outlined in 29 CFR, Part 1910.134, and AR 11-34.

(6) Provide the Installation Medical Authority with a copy of the written respiratory protection program.

d. Installation Safety Office/Installation Medical Authority. Installation safety and medical personnel have overlapping responsibilities in the implementation of this program. As mentioned in paragraph c above, the Respiratory Protection Program Administrator has overall responsibility for the program. However, safety and medical personnel should work together to perform the following duties:

(1) Conduct work site inspections to determine the need for respiratory protection and the type of respirator needed for the task involved.

(2) Provide annual training to supervisors and employees on the respiratory hazards to which they are potentially exposed and selection, use, maintenance, and storage of respiratory protective equipment. Training will occur more frequently if necessary.

(3) Provide guidance to supervisors in the preparation of SOPs for respirator use in their work areas.

(4) Approve or disapprove routine entry into immediately dangerous to life or health (IDLH) environments (including confined spaces).

e. Installation Medical Authority will--

(1) Perform qualitative and quantitative fit testing of respirators in accordance with procedures outlined in 29 CFR, Part 1910.134, to include appendixes. This task may be performed jointly with installation safety offices with qualified personnel on staff. *Persons administering qualitative and quantitative fit tests must be able to prepare test solutions, calibrate equipment and perform tests properly, recognize invalid tests, and ensure that test equipment is in proper working order.*

(2) Perform medical evaluations/examinations of employees using the mandatory questionnaire at appendix D, 29 CFR, Part 1910.134, and in accordance with procedures outlined in AR 40-5 and TB MED 502 to:

(a) Determine if employees assigned to tasks requiring the use of respirators are able to perform their duties while wearing prescribed respiratory protection.

(b) Conduct follow-up evaluations/examinations as required by appendix C of 29 CFR, Part 1910.134.

(c) Inform supervisors of the ability of each employee to wear respiratory protection and perform work required.

(d) Perform fitting for corrective lenses inside full facepiece respirators to ensure proper vision and good fit.

f. Supervisors will--

(1) Ensure that employees receive annual training on the respiratory hazards to which they are potentially exposed and the selection, use, maintenance, and storage of respiratory protective equipment. Training will be given more frequently if necessary.

(2) Ensure that employees receive medical evaluations/examinations as required.

(3) Allow employees time during normal working hours to discuss the results of medical evaluations/examinations with the installation medical authority.

(4) Prepare an SOP outlining respiratory protection program requirements for their area(s) of responsibility.

Obtain approval of the SOP from the Respiratory Protection Program Administrator prior to publication and distribution.

(5) Ensure that areas requiring the use of respiratory protective equipment are properly marked.

(6) Familiarize employees with the respiratory protection program SOP.

(7) Ensure that employees do not perform tasks requiring respiratory protection when the respirator is not being worn or does not fit properly.

(8) Implement the requirements for rescue and standby personnel in IDLH environments.

(9) Ensure that employees perform proper maintenance and care of respirators in accordance with mandatory procedures outlined in appendix B-2 to 29 CFR, Part 1910.134.

(10) Return damaged and/or malfunctioning respiratory equipment to the Respiratory Protection Program Administrator (or designated representative) for repair, replacement, or disposal.

g. Users of respiratory protective equipment will--

(1) Be familiar with respiratory protection guidelines.

(2) Use respirators in accordance with the manufacturer's instructions and training.

(3) Perform proper maintenance and cleaning of respiratory equipment as outlined in appendix B-2 of 29 CFR, Part 1910.134.

(4) Immediately notify supervisor of damaged and/or malfunctioning respiratory equipment.

(5) Undergo medical evaluations/examinations as required.

5. General

a. Goals. The goal of the Respiratory Protection Program is to eliminate workplace hazards and the need for respiratory protection. However, when effective engineering controls are not feasible, appropriate respiratory protection shall be used.

Respirators are considered an acceptable method of protection only under the following circumstances:

(1) When installation safety and medical personnel have determined that engineering and work practice controls are not adequate to control the hazard.

(2) During intermittent, nonroutine operations not exceeding one hour per week.

(3) During the interim periods while engineering controls are being designed, funded, and installed.

(4) During emergencies.

b. Conditions of employment. The ability to use respiratory protection will be a condition of employment when required by the job.

c. Respirators, medical evaluations/examinations, and training will be provided at no cost to the employee.

d. Medical evaluations and examinations. Employees will not be assigned to tasks requiring the use of respirators without prior medical evaluation. Medical evaluations/examinations will be performed in accordance with mandatory requirements outlined at appendix C of 29 CFR, Part 1910.134.

e. Restrictions.

(1) Facial hair. The presence of facial hair (i.e., beards and sideburns) can prevent a proper fit. Respirators will not be worn when facial hair prevents a good face seal.

(2) Corrective Lenses/Personal Protective Equipment (PPE). If an employee wears corrective glasses, goggles, or other personal protective equipment (e.g., helmet or faceshield), the equipment will be worn in such a manner that it does not interfere with the seal of the facepiece to the face of the user.

f. Hazardous area markings. Each area and operation requiring the use of respiratory protective equipment shall be marked to inform personnel of the work hazards or health risks involved, and the type of respirator needed. Markings will be in accordance with 29 CFR, Part 1910.145.

6. Selection of respirators

a. General. Respirators will be selected based on the respiratory hazard(s) to which the employee is exposed and

workplace and user factors that affect respirator performance and reliability. All respiratory protective equipment must be approved by the Respiratory Protection Program Administrator prior to use.

(1) Only respirators certified by the National Institute for Occupational Safety and Health (NIOSH) will be used. Respiratory protective equipment shall be used in compliance with the conditions of its certification.

(2) The Respiratory Protective Program Administrator (or designated representative, i.e., safety or medical personnel) shall identify and evaluate the respiratory hazard(s) in the workplace. This evaluation shall include a reasonable estimate of employee exposure to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. *When the Respiratory Protection Program Manager (or designated representative) cannot identify or reasonably estimate employee exposure, the atmosphere shall be classified as IDLH.*

(3) Respirators shall be selected from a sufficient number of models and sizes so that the respirator is acceptable to, and correctly fits, the user.

b. Respirators for IDLH atmospheres. The following types of respirators will be used by employees in IDLH atmospheres:

(1) A full facepiece pressure demand SCBA certified by NIOSH for a minimum service life of 30 minutes or a combination full facepiece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.

(2) Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

(3) *All oxygen-deficient atmospheres shall be considered IDLH* unless the Respiratory Protection Program Administrator demonstrates that, under all foreseeable conditions, the oxygen concentration can be maintained within the ranges specified in table II of 29 CFR, Part 1910.134.

c. Respirators for atmospheres that are not IDLH.

(1) Only respirators that are adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations, will be used.

(2) Respirators selected shall be designed to provide protection from the contaminant to which the employee is exposed.

(3) For protection against gases and vapors, the employer shall provide:

(a) An atmosphere-supplying respirator or an air-purifying respirator provided that the respirator is equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant.

(b) If an ESLI is not available, the Respiratory Protection Program Administrator will implement a change schedule for canisters and cartridges to ensure that canisters and cartridges are changed before the end of their service life. The Respiratory Protection Program Administrator shall include the information and data relied upon and the basis for the canister and cartridge change schedule and the basis for reliance on the data in the written respiratory protection program.

(4) For protection against particulates, the following types of respiratory protective equipment will be provided:

(a) An atmosphere-supplying respirator, an air-purifying respirator equipped with a filter certified by NIOSH as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH.

(b) For contaminants consisting primarily of particles with mass median aerodynamic diameters of at least 2 micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH.

7. Medical evaluations and examinations

Commanders shall identify medical personnel (see paragraph 4b(3)) responsible for performing medical evaluations/examinations. These exams will be performed using the mandatory medical questionnaire at appendix C of 29 CFR, Part 1910.134, or an initial medical examination that obtains the same information as this questionnaire.

a. Follow-up medical examinations.

(1) Follow-up medical examinations will be given to any employee who gives a positive response to any question among questions 1 through 8 in section 2, Part A, appendix C of 29 CFR, Part 1910.134, or whose initial medical examination indicates the need for a follow-up medical examination.

(2) The follow-up medical examination shall include any medical tests, consultations, or diagnostic procedures that the installation medical authority deems necessary to make a final determination.

b. Administration of the medical questionnaire and examinations.

(1) The medical questionnaire at appendix C of 29 CFR, Part 1910.134, and examinations shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire shall be administered in a manner that ensures that the employee understands its content.

(2) Supervisors will provide employees with an opportunity to discuss the questionnaire and examination results with the installation medical authority during normal working hours.

(3) Supplemental information for the Installation Medical Authority. The following information must be provided to the IMA before he/she makes a recommendation concerning an employee's ability to use a respirator:

(a) The type and weight of the respirator to be used by the employee.

(b) The duration and frequency of respirator use (including use for rescue and escape).

(c) The expected physical work effort.

(d) Additional protective clothing and equipment to be worn.

(e) Temperature and humidity extremes that may be encountered.

(4) Any supplemental information provided previously to the IMA regarding an employee need not be provided for a subsequent medical evaluation if the information and the IMA remain the same.

(5) The Respiratory Protection Program Administrator shall provide the IMA with a copy of the written respiratory protection program.

(6) When an IMA is replaced, the Respiratory Protection Program Administrator must ensure that the new IMA obtains this information, either by providing the documents directly to him/her or by having the documents transferred from the former IMA to the new IMA. However, employees do not have to be medically reevaluated solely because a new IMA comes on board.

c. Medical determination. In determining the employee's ability to use a respirator, supervisors will--

(1) Obtain a written recommendation from the Installation Medical Authority regarding the employee's ability to use the respirator. The recommendation shall include the following information:

(a) Any limitations on respirator use related to the medical condition of the employee or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator.

(b) The need, if any, for follow-up medical evaluations.

(c) A statement that the IMA has provided the employee with a copy of his/her written recommendation.

d. Employee Health Concerns. If the respirator is a negative pressure respirator and the IMA finds a medical condition that may place the employee's health at increased risk if the respirator is used, a powered air-purifying respirator (PAPR) shall be provided if the medical evaluation finds that the employee can use such a respirator. If a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then the employer is no longer required to provide a PAPR.

e. Additional medical evaluations. At a minimum, additional medical evaluations that comply with appendix C of 29 CFR, Part 1910.134, shall be provided if:

(1) An employee reports medical signs or symptoms that are related to ability to use a respirator.

(2) The IMA or Respiratory Protection Program Administrator informs the supervisor that the employee needs to be reevaluated.

(3) Information from the respiratory protection program (including observations made during fit testing and program evaluation) indicates a need for employee reevaluation.

(4) A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

8. Fit testing

Before an employee is required to use a respirator with a tight-fitting facepiece, the employee must be fit tested with the same make, model, style, and size of respirator that will be used.

a. Employees using a tight-fitting facepiece respirator must pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT). The fit test shall be administered using an OSHA-accepted QLFT or QNFT protocol. The OSHA-accepted QLFT and QNFT protocols and procedures are contained in appendix A of 29 CFR, Part 1910.134. *Persons administering qualitative and quantitative fit tests must be able to prepare test solutions, calibrate equipment and perform tests properly, recognize invalid tests, and ensure that test equipment is in proper working order.*

b. Whenever a different respirator facepiece (size, style, model or make) is used, employees using a tight-fitting facepiece respirator must be fit tested prior to initial use of the respirator and at least annually thereafter.

c. Additional fit tests shall be conducted whenever the employee reports, or the supervisor, IMA, or Respiratory Protection Program Administrator makes visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include but are not limited to: facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

d. If after passing a QLFT or QNFT, the employee subsequently notifies the supervisor, Respiratory Protection Program Administrator, or IMA that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator facepiece and be retested.

9. Use of respirators

a. Facepiece seal protection. Supervisors shall not permit respirators with tight-fitting facepieces to be worn by employees who have:

(1) Facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function.

(2) Any condition that interferes with the face-to-facepiece seal or valve function.

b. Corrective lenses/PPE. If an employee wears corrective glasses or goggles or other personal protective equipment, the supervisor shall ensure that such equipment is worn in a manner that does not interfere with the seal of the facepiece to the face of the user.

c. User seal check. For all tight-fitting respirators, supervisors shall ensure that employees perform a user seal check each time they put on the respirator using the procedures outlined in appendix B-1 of 29 CFR, Part 1910.134, or procedures recommended by the respirator manufacturer that are as effective as those in this appendix.

d. Maintaining respirator effectiveness. Appropriate surveillance shall be maintained of work area conditions to determine the degree of employee exposure or stress. When there is a change in the working conditions or degree of employee exposure or stress that may affect respirator effectiveness, the Respiratory Protection Program Manager shall reevaluate the continued effectiveness of the respirator.

e. Supervisors shall ensure that employees leave the respirator use area:

(1) To wash their faces and respirator facepieces as necessary to prevent eye or skin irritation associated with respirator use.

(2) If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece.

(3) To replace the respirator, filter, cartridge, or canister elements.

(4) If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece, the respirator must be repaired or replaced before the employee is allowed to return to the work area.

10. Cleaning, maintenance, and storage of respirators

a. Cleaning. Respirators that are clean, sanitary, and in good working order shall be provided to employees. Respirators must be cleaned and disinfected in accordance with mandatory procedures outlined in appendix B-2 to 29 CFR, Part 1910.134, or procedures recommended by the respirator manufacturer, provided that such procedures are of equivalent effectiveness. Respirators shall be cleaned and disinfected at the following intervals:

(1) Respirators used exclusively by one employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.

(2) Respirators used by more than one employee shall be cleaned and disinfected before being worn by another individual.

(3) Respirators maintained for emergency use shall be cleaned and disinfected after each use.

(4) Respirators used in fit testing and training shall be cleaned and disinfected after each use.

b. Storage. Respirators will be stored in the following manner:

(1) Respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. They shall be packed or stored to prevent deformation of the facepiece and exhalation valve.

(2) Emergency respirators shall be stored in areas accessible to employees. They will be stored in accordance with manufacturer instructions in compartments or covers that are clearly marked as containing emergency respirators.

c. Inspection. The following procedures will be followed when inspecting respirators:

(1) Respirators used in routine situations shall be inspected before each use and during cleaning.

(2) Respirators maintained for use in emergency situations shall be inspected at least monthly in accordance with the manufacturer's recommendations and shall be checked for proper function before and after each use.

(3) Emergency escape-only respirators shall be inspected before being carried into the workplace for use.

(4) Supervisors will ensure that respirator inspections include the following:

(a) A check of respirator function, tightness of connections, and the condition of the various parts including but not limited to the facepiece, head straps, valves, connecting tube, cartridges, canisters, and filters.

(b) A check of elastomeric parts for pliability and signs of deterioration.

d. Self-contained breathing apparatus. In addition to the requirements of this section, self-contained breathing apparatus shall be inspected monthly. Air and oxygen cylinders shall be maintained in a fully charged state and shall be recharged when the pressure falls to 90% of the manufacturer's recommended pressure level. The Respiratory Protection Program Administrator (or designated representative, i.e., safety or medical personnel) will ensure that the regulator and warning devices function properly.

e. Respirators for emergency use. For respirators maintained for emergency use, the Respiratory Protection Program Administrator shall:

(1) Certify the respirator by documenting the date the inspection was performed, the name (or signature) of the person who performed the inspection, the findings, required remedial action, and a serial number or other means of identifying the inspected respirator.

(2) Provide this information on a tag or label that is attached to the storage compartment for the respirator. This information will be kept with the respirator or included in inspection reports stored as paper or electronic files. This information will be maintained until replaced following a subsequent certification.

f. Repairs.

(1) Supervisors shall return respirators that fail an inspection or that are otherwise found to be defective to the Respiratory Protection Program Administrator (or designated representative).

(2) Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such

operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator.

(3) Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed.

(4) Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

11. Procedures for ensuring adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators

a. OSHA standards require supervisors to ensure that employees using atmosphere-supplying respirators (supplied-air and SCBA) are provided with breathing gases of high purity.

b. Compressed air, compressed oxygen, liquid air, and liquid oxygen used with respiratory protective equipment must meet the following specifications:

(1) Compressed and liquid oxygen shall meet the United States Pharmacopoeia requirements for medical or breathing oxygen.

(2) Compressed breathing air shall meet at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:

(a) Oxygen content.

(b) Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less.

(c) Carbon monoxide (CO) content of 10 ppm or less.

(d) Carbon dioxide content of 1,000 ppm or less.

(e) Lack of noticeable odor.

c. Compressed oxygen will not be not used in atmosphere-supplying respirators that have previously used compressed air.

d. Oxygen concentrations greater than 23.5% are used only in equipment designed for oxygen service or distribution.

e. The Respiratory Protection Program Administrator will ensure that cylinders used to supply breathing air to respirators meet the requirements outlined in 29 CFR 1910.134, paragraph (i)(4).

12. Use of respirators in IDLH atmospheres

a. General. For all IDLH atmospheres, supervisors will ensure that:

(1) One employee (or when needed, more than one employee) is located outside the IDLH atmosphere.

(2) Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere and the employee(s) located outside the IDLH atmosphere.

(3) The employee(s) located outside the IDLH atmosphere is trained and equipped to provide effective emergency rescue.

(4) The supervisor (or designated representative) is notified before the employee(s) located outside the IDLH atmosphere enters the IDLH atmosphere to provide emergency rescue. Once notified, the supervisor (or designated representative) will provide the necessary assistance appropriate to the situation.

(5) Employee(s) located outside IDLH atmospheres is equipped with pressure demand or other positive pressure SCBAs, or a pressure demand or other positive pressure supplied-air respirator with auxiliary SCBA and either:

(a) Appropriate retrieval equipment for removing individuals from IDLH atmospheres where retrieval equipment would contribute to the rescue of the employee(s) and would not increase the overall risk resulting from entry OR

(b) Equivalent means for rescue where retrieval equipment is not required under paragraph e(1) above.

b. Procedures for interior structural firefighting. In addition to the requirements outlined in this section, the supervisor shall ensure that:

(1) At least two employees enter the IDLH atmosphere and remain in visual or voice contact with one another at all times.

(2) At least two employees are located outside the IDLH atmosphere.

(3) All employees engaged in interior structural firefighting use SCBAs.

NOTES:

(1) One of the two individuals located outside the IDLH atmosphere may be assigned to an additional role as long as this individual is able to perform assistance or rescue activities without jeopardizing the safety or health of any firefighter working at the scene.

(2) Nothing in this section is meant to preclude firefighters from performing emergency rescue activities before an entire team has assembled.

13. Training

a. Training must be provided to employees who are required to use respirators. The training must be comprehensive, understandable, and recur annually--more often if necessary. Basic information on use of respirators must be provided to employees who wear respirators when not required (i.e., voluntary use of dust masks). Employees must be able to demonstrate knowledge of at least the following:

(1) Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the effectiveness of the respirator.

(2) The limitations and capabilities of the respirator.

(3) How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.

(4) How to inspect, put on and remove, use, and check the seals of the respirator.

(5) Proper cleaning, maintenance, and storage procedures for respiratory protective equipment.

(6) How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.

(7) The general requirements of 29 CFR, Part 1910.134, to include appendixes.

b. Training shall be conducted in a manner that is understandable to the employee.

c. Training shall be provided prior to the employee using respiratory protective equipment in the workplace.

d. A supervisor who is able to demonstrate that a new employee has received training within the last 12 months that addresses the elements specified in paragraph 13a above is not required to repeat such training provided that the employee can demonstrate knowledge of these elements. Previous training not repeated initially by the employer must be provided no later than 12 months from the date of the previous training.

e. Retraining shall be administered annually and when the following situations occur:

(1) Changes in the workplace or the type of respirator render previous training obsolete.

(2) Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill.

(3) Any other situation that arises in which retraining appears necessary to ensure safe respirator use.

f. The basic advisory information contained in appendix D of 29 CFR, Part 1910.134, shall be provided in either written or oral format to employees who wear respirators when such use is not required.

14. Program evaluation

The Respiratory Protection Program Administrator shall conduct evaluations of the workplace to ensure that the written respiratory protection program is being properly implemented and will consult employees to ensure that they are using the respirators properly.

a. The Respiratory Protection Program Administrator (or designated representative, i.e., safety or medical personnel) will conduct evaluations of the workplace as necessary to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective.

b. The written respiratory protection program will be revised as needed to reflect changes in the workplace or in respirator use. These changes include but are not limited to

different respirator choices, changes in fit testing, and changes in work operations.

c. Supervisors shall consult with employees required to use respirators on a regular basis to assess the employees' views on program effectiveness and to identify any problems. Problems that are identified during this assessment shall be corrected. Factors to be assessed include but are not limited to:

(1) Respirator fit (including the ability to use the respirator without interfering with effective workplace performance).

(2) Appropriate respirator selection for the hazards to which the employee is exposed.

(3) Proper respirator use under the workplace conditions that the employee encounters.

(4) Proper maintenance of respiratory protective equipment.

15. Recordkeeping

The Respiratory Protection Program Administrator (or designated representative i.e., installation medical authority) shall establish and retain written information regarding medical evaluations, fit testing, and the respiratory protection program. This information will provide a record for compliance determinations by OSHA.

a. Medical evaluations. Records of medical evaluations required by this section must be retained and made available in accordance with 29 CFR, Part 1910.1020.

b. Fit testing.

(1) The Respiratory Protection Program Administrator (or designated representative) shall establish a record of the qualitative and quantitative fit tests administered to an employee including:

(a) The name or identification of the employee tested.

(b) Type of fit test performed.

(c) Specific make, model, style, and size of respirator tested.

(d) Date of test.

(e) The pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs.

(2) Fit test records shall be retained for respirator users until the next fit test is administered.

(3) A written copy of the current respiratory protection program shall be retained by the Respiratory Protection Program Administrator, installation safety office, IMA, and other individuals as deemed appropriate.

(4) Written materials required to be retained under this paragraph will be made available upon request to affected employees. These documents will also be produced upon request to MDW safety and OSHA officials during site visits.

16. Use of respirators when not required by OSHA standards

Respirators are an effective method of protection against hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the permissible exposure levels to provide an additional level of comfort and protection for employees. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the employee. Sometimes employees may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If respirators are provided to employees for voluntary use or if employees provide their own respirators, certain precautions must be taken to ensure that the respirator itself does not present a hazard. As a minimum, the following precautions should be taken:

a. Read and follow instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the limitations of the respirator.

b. Select respirators that are NIOSH-certified for protection against the contaminant(s) to which the employee is exposed. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much protection it provides.

c. Respirators should not be worn in atmospheres which contain contaminants for which the respirator is not designed to protect against. (Example: A respirator designed to filter dust particles does not protect against gases or vapors).

d. Employees must keep track of individual respirators so that they do not mistakenly use someone else's respirator.

Appendix A
References

Section I
Required Publications

29 CFR Part 1910	Code of Federal Regulations Department of Labor
AR 11-34	The Army Respiratory Protection Program
AR 40-5	Preventive Medicine
TB MED 502	Occupational and Environmental Health Respiratory Protection Program

Section II
Related Publications

AR 385-10	The Army Safety Program
DA Pam 385-3	Personal Protective Equipment
TB MED 509	Occupational and Environmental Health Spirometry in Occupational Health Surveillance

GLOSSARY

Section I
Abbreviations

AR	Army Regulation
IDLH	Immediately Dangerous to Life and Health
IMA	Installation Medical Authority
MDW	U.S. Army Military District of Washington
NIOSH	National Institute for Occupational Safety and Health
OSHA	Occupational Safety and Health Administration
PEL	Permissible Exposure Level
PPE	Personal Protective Equipment

Section II
Terms

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.

Atmosphere-supplying respirator

A respirator that supplies the user with breathing air from a source independent of the ambient atmosphere. Includes supplied-air respirators and self-contained breathing apparatus (SCBA).

Confined Space

A space that meets the following conditions: 1) is large enough and configured so that an employee can enter and perform assigned work; 2) has limited or restricted means for entry or exit (i.e., storage bins, vaults, pits, tanks, vessels); 3) is not designed for continuous occupancy.

Contaminant

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

Demand Respirator

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

End-of-service-life indicator (ESLI)

A system that warns the respirator user of the approach of the end of adequate respiratory protection (e.g., that the sorbent is approaching saturation or is no longer effective).

Filtering facepiece (dust mask)

A negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium.

Fit Test

The use of a protocol to quantitatively or qualitatively evaluate the fit of a respirator on an individual.

Hazardous Atmosphere

An atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self rescue (i.e., exit unaided from a permit space), injury or acute illness from one the following causes: 1) flammable gas, vapor, or mist in excess of 10 percent of its lower flammable limit; 2) airborne concentrations of contaminants that exceed PELs; 3) atmospheric oxygen concentrations below 19.5% or above 23.5%; or 4) any other atmosphere that is immediately dangerous to life and health (IDLH).

High Efficiency Particulate Air (HEPA) Filter

A filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH particulate filters are the N100, R100, and P100 filters.

Immediately Dangerous to Life and Health

Any condition that poses an immediate or delayed threat to life or that would cause irreversible adverse health effects or that would interfere with one's ability to escape unaided from a permit space.

Industrial Hygienist

A professional qualified by education, training, and experience to anticipate, recognize, evaluate, and develop controls for occupational health hazards.

Installation Medical Authority

The unit surgeon, command chief surgeon, U.S. Army medical department activity/Army medical center commanders, or the director of health services (or his/her designated representative) responsible for providing medical support to a unit, command, or installation.

NOTE: For the purposes of this regulation, the term "installation medical authority (IMA)" is used to define medical personnel (i.e., occupational health nurse, physician, etc.) appointed by commanders responsible for performing the medical duties outlined in this regulation.

Interior Structural Firefighting

The physical activity of fire suppression, rescue, or both, inside of buildings or enclosed structures.

Intermittent Nonroutine Operations

Operations occurring for 1 hour per day. Operations that occur 150 hours per year are not considered intermittent nonroutine operations.

Loose-fitting Facepiece

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

Oxygen Deficient Atmosphere

An atmosphere containing less than 19.5% oxygen by volume.

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.

Qualitative Fit Test (QLFT)

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.

Self Contained Breathing Apparatus (SCBA)

Provides respiratory protection for various periods of time by providing a portable air supply that is usually worn by the user.

Tight-fitting facepiece

A respiratory inlet covering that forms a complete seal around the face.

User seal check

Action(s) conducted by the respirator user to determine if the respirator is properly sealed to the face.