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**Medical Operations**

**INDUSTRIAL RESPIRATORY PROTECTION  
PROGRAM**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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(Maj Minh T. Vuong)  
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This instruction implements AFOSH Standard 48-137, Respiratory Protection Program, and outlines responsibilities and methods for implementing and maintaining an industrial respiratory protection program at Malmstrom AFB. Respiratory protective device users must be physically and psychologically able to use their respirator. The provisions of this instruction are applicable to all personnel, activities, and organizations assigned to Malmstrom AFB, using any form of respiratory protection (RP). This publication is consistent with Air Force Occupational Safety and Health (AFOSH) Standards and Department of Labor Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.134.

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***SUMMARY OF REVISIONS***

Deleted *Cleaning, Maintenance, and Storage of Respirators* and *Sample Office Instruction* (examples provided in AFOSH Standard 48-137, Attachments 12 and 15); provided by Bioenvironmental Engineering (BE) upon request. Added requirement for workplace supervisor to provide respirator user list to BE. Added *Selection and Use of Respirators* (3.1.), *Training* (3.2.), and *Fit Testing* (3.3.). Consolidated supervisor's responsibilities .

**1. Purpose.** To ensure areas requiring respiratory protection are identified and personnel working in those areas are fitted with the proper respirator and trained on its use and care. This instruction also outlines instructions for implementing a respiratory protection program.

## 2. Responsibilities.

- 2.1. Wing Commander will ensure a respiratory protection program is established.
- 2.2. Chief, BE (341 MDOS/SGOAB) is designated installation medical authority for conducting the respiratory protection program on Malmstrom AFB, and will :
  - 2.2.1. Specify the use and types of respiratory protective devices to be used based on air sampling data and industrial hygiene survey results.
  - 2.2.2. Conduct annual evaluations and air sampling as necessary for all areas requiring respiratory protection .
  - 2.2.3. With the assistance of Public Health, ensure all personnel who require the use of respirators have received a medical evaluation.
    - 2.2.3.1. Medical evaluations will be scheduled before respiratory device training is accomplished by BE.
    - 2.2.3.2. Personnel will not perform duties requiring the use of a respiratory protective device until satisfactorily completing the physical evaluation, fit testing, and training .
    - 2.2.3.3. The Occupational Health Working Group will determine the type and extent of medical evaluation required .
  - 2.2.4. Conduct training and fit testing of personnel and provide technical assistance to supervisors in the use and care of respiratory protective devices.
    - 2.2.4.1. Respirator fit testing and training will be documented on the workplace's AF Form 2767, *Occupational Health Training and Protective Equipment Fit Testing*, or equivalent, located in the case file .
    - 2.2.4.2. Each individual fit tested and trained for respiratory protective devices will be provided a fit test result sheet that will list the type and size of respirator on which the individual was fit tested.
  - 2.2.5. Provide to the shop or section supervisor, by fit test result sheet or AF Form 2767, personnel trained in the use of respirators.
- 2.3. Base Supply.
  - 2.3.1. Restrict the release of respirators by assigning a health hazard code to all respirators (unless otherwise notified by BE) .
  - 2.3.2. Issue only those respiratory devices approved by BE.
  - 2.3.3. Contact BE prior to authorizing the local purchase of respirators and respiratory protection equipment .
  - 2.3.4. Ensure no "suitable substitute" is ordered for any respirator or in place of any respirator part.
- 2.4. Immediate Supervisors.
  - 2.4.1. Be knowledgeable of the near and long term effects of the respiratory hazards in their respective shops, and the maintenance and care of the appropriate respiratory protective devices.

- 2.4.2. Ensure newly assigned personnel accomplishing a task requiring respiratory protection receive initial training and physical evaluation prior to performing duties requiring respiratory protection .
  - 2.4.3. Ensure all requirements of AFOSH Standard 48-137, applicable technical orders, and this instruction are met .
  - 2.4.4. Establish standard operating procedures (examples available upon request from BE) and submit them to BE for review and approval during the annual workplace assessment survey.
  - 2.4.5. Establish a cleaning and maintenance program for respirators used collectively or for emergencies.
  - 2.4.6. Ensure individuals are fit tested and trained in the use of respirators at least annually. Update the individual's AF Form 55, Employee Safety and Health Record, or equivalent to reflect this training and maintain a copy of the respirator fit test result form.
  - 2.4.7. Ensure individuals maintain their respirators in good repair at all times.
  - 2.4.8. Ensure only those respirators approved by BE are procured and used.
  - 2.4.9. Notify BE of any new potential sources of respiratory hazards and any changes to previously documented hazards .
  - 2.4.10. Ensure compressed breathing air meets AFOSH Standard 48-137 and T.O. 42B-1-22.
  - 2.4.11. Provide BE a list of assigned employees who wear respiratory protection (in most instances, this list will be updated during the shop's annual fit test procedure).
- 2.5. Fire Department.
- 2.5.1. Continue current Self-Contained Breathing Apparatus (SCBA) training program monitored by BE.
  - 2.5.2. Submit current standard operating procedures to BE annually or when updated on the use, care, and maintenance of SCBA.
  - 2.5.3. Notify BE of SCBA training schedule.
  - 2.5.4. Fill all SCBA cylinders used on the base in accordance with AFOSH Standard 48-137 and T.O. 41B-1-22.
  - 2.5.5. Submit results of compressed breathing air testing results to BE upon receipt.
- 2.6. Base Ground Safety.
- 2.6.1. Spot check individuals using a respiratory protective device to ensure personnel have a current fit test result sheet on file with their AF Form 55.
  - 2.6.2. Ensure individuals are using the appropriate brand and model respirator for the task intended.
  - 2.6.3. Notify BE of any area where a suspect respiratory hazard exists.
- 2.7. Tenant Units. The Host Tenant Support Agreement will include guidance concerning responsibilities as found in AFI 25-201, *Support Agreements Procedures*.

### 3. Selection and Use of Respirators.

3.1. 341 MDOS/SGOAB, BE is the base authority for determining if RP is required in the workplace. This determination is made by evaluating workplace hazards and the adequacy of controls used to limit worker exposures. When this evaluation indicates respirators are required, BE determines which type of respirator is best suited to the individual and to their specific exposure scenario. BE notifies workers who are required to wear respirators through the workplace supervisor and enrolls them in the RP program.

3.2. Respiratory protection is the least desirable means of controlling exposure to an airborne hazard. RP should only be used in the following situations:

3.2.1. As an interim control while more effective controls are being implemented. Preferred control methods include eliminating hazards through engineering controls, substituting hazardous material (HAZMAT) items, isolating hazardous operations or providing administrative controls.

3.2.2. When required by specific directives. Examples include inspecting or abating asbestos-containing material, applying pesticides and responding to fires or HAZMAT incidents.

3.2.3. When BE determines that more effective controls for a specific hazard are not technically or economically feasible .

### 4. Training. Employees must receive RP training before performing any task requiring a respirator.

4.1. Initial and Annual Training. BE provides initial and annual training as follows:

4.1.1. Supervisors. Initial training is provided to supervisors who oversee work activities of one or more persons who must wear respirators. This training includes subjects identified in paragraph 7.1 of AFOSH Standard 48-137.

4.1.2. Respirator Wearers. Initial training and annual instruction/retraining are provided to respirator wearers on the elements identified in paragraph 7.3 of AFOSH Standard 48-137. Supervisors contact BE to schedule initial training for new employees and annual training for employees who have already been trained. Workplace supervisors must track training dates to ensure training does not lapse.

4.2. Special Training.

4.2.1. Hood Type Respirators. Supervisors ensure potential users are trained in the use of these respirators. Training plans should be coordinated through BE for review prior to training. **NOTE:** These respirators do not require fit testing or medical exams .

4.2.2. Emergency Response and Rescue Teams. The base Fire Protection Training office trains response and rescue team members on the use and maintenance of SCBA. BE will fit test team members.

4.3. Training Documentation. Supervisors document initial and annual training on AF Form 55, Employee Safety and Health Record, or an approved automated system. BE documents training on AF Form 2767 or equivalent.

### 5. Fit Testing. After employees are medically cleared to wear RP, BE will fit test them with an approved respirator.

5.1. Initial fit testing is required before employees perform tasks using a respirator. Fit testing must also be done annually for all tight fitting respirators.

5.2. Workplace supervisors identify respirator wearers who need initial and annual fit testing and make sure they receive it. Contact BE to schedule initial fit testing for new employees and annual fit testing at least two weeks prior to the training/fit testing expiration date.

## **6. General.**

### 6.1. Individual requirements.

6.1.1. Respirators will not be worn when conditions such as growth of a beard or sideburns, skull cap which projects under the face piece, temple pieces on eyeglasses, or the absence of one or both denture pieces prevent a good face piece-to-face seal.

6.1.2. Individuals will wear dentures properly and also remove hair growth, which prevents proper fit of face piece.

6.1.3. Wear only those respirators (manufacturer, model, size) they were fit tested for.

### 6.2. Airline respirators.

6.2.1. Must not be connected to a compressor that is used to fill any chemical tanks.

6.2.2. Breathing air compressors, if oil lubricated, must be equipped with a high temperature shut-off and/or a carbon monoxide warning system.

6.2.3. Only equipment (i.e., hood mask or airline) manufactured as part of the original assembly, or as replacement parts produced by the original manufacturer, will be used in an airline system. These systems will not be modified.

6.2.4. BE must receive a copy of analysis, reporting quality of compressed breathing air, from the Fire Department and designated industrial facilities using compressed breathing air. This requirement must be met every 90 days.

## **7. Program Administration.**

7.1. BE performs annual self-inspections of the base RP program according to paragraph 9.5.5. of AFOSH Standard 48-137 and reports results to the Aerospace Medicine Council and the Commander's Combined Safety Council.

7.2. BE reviews workplace OIs and other aspects of workplace RP Programs during routine workplace assessment visits. Visits to workplaces determined by BE to have higher exposure risks are made at least every 12 months; workplaces with moderate exposure risks are visited at least every 24 months.

C. DONALD ALSTON, Col, USAF  
Commander, 341 Space Wing

**Attachment 1****GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

29 Code of Federal Regulation (CFR) 1910.134, Respiratory Protection – General Industry.  
American National Standards Institute, Practices for Respiratory Protection Z88.2-1992.  
American National Standards Institute, Respirator Use – Physical Qualifications for Personnel Z88.6-1984.  
AFOSH Standard 48-137, *Respiratory Protection Program*.  
AFOSH Standard 91-31, *Personal Protective Equipment*.  
Technical Order (T.O.) 42B-1-22, *Quality Control of Compressed and Liquid Breathing Air*.  
AFI 48-123, *Medical Examination and Standards*.

***Abbreviations and Acronyms***

**AFI**—Air Force Instruction  
**AFIERA**—Air Force Institute for Environment, Safety, and Occupational Health Risk Management  
**AFMAN**—Air Force Manual  
**AFMOA**—Air Force Medical Operations Agency  
**AFOSH**—Air Force Occupational Safety and Health  
**AFPD**—Air Force Policy Directive  
**AFSC**—Air Force Specialty Code  
**AFSPC**—Air Force Space Command  
**BE**—Bioenvironmental Engineering  
**CFR**—Code of Federal Regulations  
**DoDI**—Department of Defense Instruction  
**DOT**—Department of Transportation  
**DSN**—Defense Switched Network  
**MAFB**—Malmstrom Air Force Base  
**MDOS**—Medical Operations Squadron  
**OI**—Operating Instruction  
**OSHA**—Occupational Safety and Health Administration  
**RP**—Respirator Protection  
**SCBA**—Self-Contained Breathing Apparatus

**TO**—Technical Order

**TODE**—Total Organ Dose Equivalent