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Aerospace Medicine

RESPIRATORY PROTECTION PROGRAM

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OPR: 8 MDOS/SGOAB
(Major Randy R. Smith)
Supersedes 8 FWI 48-105, 12 January 2001

Certified by: 8 MDG/CC
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This instruction implements AFD 48-1, *Aerospace Medical Program*, OSHA, 29 CFR 1910.134, *Respiratory Protection*, and AFOSH Standard (Std) 48-137, *Respiratory Protection Program*, Kunsan Air Base, Korea. This instruction applies to all personnel assigned or attached units to the 8th Fighter Wing, and Kunsan AB, Korea tenant unit personnel that have been authorized to wear respirators for protection against inhalation of harmful contaminants, or for emergency escape or rescue. This instruction is not applicable when using the M17, MCU-2/P, M-40 or M-45-series protective masks for response to incidents or accidents involving nuclear, biological, or chemical warfare agents. Respiratory protection is considered the least desirable method of controlling worker's exposures to hazardous materials. It will only be used when: Directed by regulation, airborne concentrations are/could be above the OELs, engineering controls are not feasible, as interim controls, and/or during emergencies.

SUMMARY OF REVISIONS

Responsibilities, selection procedures, fit-test and training procedures, and documentation procedures have been revised. "Base Supply" responsibilities specified in the previous edition are modified and re-assigned to reflect current unit-level procurement practices. The IEX "R" code requirement for respirators is removed. A bar (|) indicates revision from the previous edition.

1. Responsibilities:

1.1. Bioenvironmental Engineering (BE) (8 MDOS/SGOAB) will:

- 1.1.1. Be the base authority on respiratory protection.
- 1.1.2. Recommend substitution of a less hazardous material or process, eliminate hazards through engineering controls, recommend isolation measures for hazardous operations or processes, or

recommend administrative controls before recommending the use of respirators as a permanent protective measure.

1.1.3. Authorize respirator use IAW AFOSH Std 48-137, Chapters 3 and 4.

1.1.4. Conduct air sampling of the processes and chemicals used in the processes in industrial environments, prior to determining if a valid requirement exists for issuing respiratory protection to any person.

1.1.5. Conduct initial training, selection, and fit-testing IAW AFOSH Std 48-137, Chapters 6 and 7.

1.1.6. Conduct initial and annual fit-testing for personnel requiring respiratory protection IAW AFOSH Std 48-137. This includes fit-testing for firefighters.

1.1.7. Ensure that all workers have completed 8 FW Form 14, *Medical Evaluation Questionnaire*, prior to fit-testing.

1.1.8. Issue a Porta-Count computer generated Certificate of Respirator Fit-Test in lieu of the AF Form 2772, *Certificate of Respirator Fit-Test*.

1.1.9. Assist shop supervisors in developing a Respiratory Protection Program for their work area.

1.1.10. Conduct inspections of the Respiratory Protection Program at all work areas enrolled in the program to determine effectiveness of the program. This is normally accomplished during the industrial hygiene survey process.

1.2. Supervisors will:

1.2.1. Be trained IAW AFOSH Std 48-137, Chapter 7, Section 7.1.

1.2.2. Comply with the requirements of AFOSH Std 48-137, Chapter 9, Section 9.3, which includes specifications on the content of the shop OI.

1.2.3. Create and maintain the required Respiratory Protection Operating Instruction (OI) using AFOSH Std 48-137, Attachment 20 as a template. This OI must be tailored to each individual shop area. Contact 8 MDOS/SGOAB for assistance in preparing this instruction.

1.2.4. Maintain AFOSH Std 48-137 in the work area and comply with the requirements of Chapter 2, Section 2.5.2.

1.2.5. Ensure that only government provided respirators are worn in the work place, that no employee wears a respirator unless required or recommended by 8 MDOS/SGOAB.

1.2.6. Ensure that all respirators are worn and maintained IAW AFOSH Std 48-137, Chapter 8.

1.2.7. Ensure that personnel are fit-tested initially and annually thereafter. Schedule fit-testing by calling 8 MDOS/SGOAB at 782-4670.

1.2.8. Conduct training for FFPD per [Attachment 2](#), *8th Fighter Wing FFPD Training Plan*.

1.2.9. Ensure that respirators are accessible to 8 MDOS/SGOAB to perform inspections on the storage and cleanliness of the respirators.

1.2.10. Ensure that respirator cartridges and filters are maintained and changed per 8 MDOS/SGOAB or manufacturers recommendation.

1.2.11. Collect periodic breathing air quality samples of supplied air systems IAW T.O. 42B-1-22, *Quality Control of Compressed and Liquid Breathing Air*. This applies to breathing air that is provided by any type of compressed system except a free air type such as the Rhine Air or Bullard free air system. Send samples to:

Aerospace Fuels Laboratory
Det 44, SA-ALC/SFTLG
Unit 5161
APO AP 96368-5161
DSN: 634-3394

1.2.12. Forward breathing air analysis results to 8 MDOS/SGOAB within two weeks of receipt.

1.2.13. Call BE at 782-4670 as needed for information and guidance regarding respiratory protection matters. In case of emergency after duty hours, a BE representative can be reached by dialing 782-7300 and entering the pager #6160.

1.3. Unit supply functions shall:

1.3.1. Ensure that respirators and respirator parts are not issued as suitable substitutes. Mixing of parts invalidates the NIOSH equipment approval number assigned.

1.3.2. Ensure respirator stock levels are available as directed by BE. This is usually a cooperative decision between BE, the shop supervisor using the respiratory protection, and the unit supply function.

1.4. The 8th Civil Engineer, Fire Protection Flight (8 CES/CEF) will:

1.4.1. Train Fire Fighters on any currently in use, SCBA face piece, provided:

1.4.1.1. The training plan covers the general hazards of Fire Fighter duties, hazardous material response, and the requirements of AFOSH Std 48-137, Chapter 8.

1.4.1.2. The training plan is reviewed by BE annually.

1.5. Workers shall:

1.5.1. Ensure that the usage, care and maintenance of their respirators is accomplished IAW the shop OI and AFOSH Std 48-137, Chapter 8.

1.5.2. Be fit-tested and trained annually on those required or recommended respirators provided to them by the government.

1.5.3. Comply with the requirements of AFOSH Std 48-137, Chapter 2, Section 2.5.3.

1.5.4. Comply with the filter change requirements as directed by the shop OI, manufacturers recommendation, or BE.

2. Selection, Use and Limitations:

2.1. BE will select respirators for permanent use only as a last resort. Selection will depend upon air sample results, expanded OSHA Standards, T.O. requirements, interim use, or emergency response based upon the nature of the hazard and the work process requirements of personnel.

2.2. Only respirators approved by NIOSH shall be used for industrial respirator protection.
WARNING: Military chemical/biological agent masks are not NIOSH approved respirators.

3. Fit-Testing and Training:

3.1. Annual fit-testing and respirator training will be accomplished for any person where BE requires or recommends respirator use. All initial fit-testing will be documented on the Porta-Count computer-generated Certificate of Respirator Fit-Test in lieu of the AF Form 2772. Annual and initial training and fit-testing will be documented by the shop supervisor on the AF Form 55, *Employee Safety and Health Record*.

3.2. Semiannual fit-testing and respirator training will be conducted for those shops that require it IAW the OSHA expanded standards (e.g., Asbestos and Lead workers).

3.3. Emergency and rescue teams will be trained on the specific hazards by the team supervisors. Fit-testing and respirator training will be conducted by BE, if required.

3.4. Refrain from smoking at least 30 minutes prior to respirator fit-testing.

3.5. Fit-testing will be scheduled by calling BE at 782-4670 for an appointment. The supervisor is responsible for identifying personnel who need initial and periodic fit-testing.

3.6. All fit-testing shall be performed by BE.

3.7. Respirator wearers will not be fit-tested unless they are medically cleared to wear the respirator. 8 FW Form 14 is the medical evaluation used as the precursor for this process.

4. Forms Prescribed. 8 FW Form 14, *Medical Evaluation Questionnaire*.

ROBIN RAND, Colonel, USAF
Commander

Attachment 1

GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

References

AFOSH Std 48-137, *Respiratory Protection Program*.

29 CFR 1910.134, *Respiratory Protection*.

Abbreviations and Acronyms

AFOSH—Air Force Occupational Safety and Health

BE—Bioenvironmental Engineering

FFPD—Filtering Face Piece Devices

HEPA—High Efficiency Particulate Air

IAW—In Accordance With

IDLH—Immediately Dangerous to Life and Health

IEX—Issue Exception Code

NIOSH—National Institute of Occupational Safety and Health's

OI—Operating Instruction

OSHA—Occupational Safety and Health Administration

OEL—Occupational Exposure Limits OEL

SCBA—Self-Contained Breathing Apparatus

T.O.—Technical Order

Attachment 2

8TH FW FILTERING FACE PIECE DEVICE (FFPD) TRAINING PLAN

A2.1. Objective: To ensure personnel understand the uses and limitations of FFPD, such as the 3M 8710 or comparable FFPD. **NOTE:** N-95 masks used by medical personnel for Tuberculosis or other infectious disease control are not FFPD. These are true respirators that must be fitted and personnel trained in proper use according to the AFOSH Std 48-137 and this instruction.

A2.2. References:

A2.2.1. AFOSH Std. 48-137.

A2.2.2. 9 CFR 1910.134.

A2.3. Use of FFPD limitations:

A2.3.1. FFPD do not provide protection against, gases, vapors, fumes or asbestos. This includes but is not limited to spray paint vapors, thinners, solvent cleaning operations, and adhesive vapors.

A2.3.2. Will not be used for entering into or escaping from atmospheres that are IDLH. Contact 8th Medical Operations Squadron, Bioenvironmental Engineering (8 MDOS/SGOAB) for guidance on IDLH environments.

A2.3.3. Cannot be quantitatively or qualitatively fit-tested.

A2.3.4. Will not be used where OSHA expanded standards specifically require the use of higher levels of respiratory protection.

A2.3.5. Will not be used for particulates where measured concentrations are greater than ten times the permissible exposure limit.

A2.3.6. Will not be used to protect health care workers where Particulate Filters (i.e., P-100, formerly known as HEPA or HEPA filters) are required.

A2.3.7. Will not supply the wearer with oxygen.

A2.4. Uses:

A2.4.1. Non-hazardous levels of paint spray mists (they will not protect against the vapors associated with the mists).

A2.4.2. Sweeping floors, wood dusts, general house keeping type cleaning where dust is present.

A2.4.3. For comfort purposes to protect against nuisance levels of particulates when approved by BE.

A2.4.4. The manufacturers instructions.

A2.5. Proper Fit and Wear:

A2.5.1. Cup the face piece in your hand, with the nose cup at your fingertips, allows the headband to hang freely below your hand.

A2.5.2. Position the face piece close enough to your face to pull the bottom strap over your head, allowing the strap to rest around the back of the neck just below the ears.

A2.5.3. Position your chin in the face piece and pull the top strap over your head resting it on the crown at the top, back of your head.

A2.5.4. Place the fingertips from both hands at the top of the metal nose piece and while exerting inward pressure, move your fingertips down both sides of the metal band. Simply pinching the nose-piece with one hand may cause a bad fit and result in less effective respirator performance.

A2.5.5. If you have doubts about the atmosphere, contact your supervisor or BE.

A2.5.6. Failure to follow all manufacturers instructions on the use of the face piece device and/or failure to wear the face piece during all times of exposure can reduce respirator effectiveness.

A2.6. Inspection and Maintenance:

A2.6.1. Inspect the FFPD before and after each use.

A2.6.2. FFPD do not require cleaning or maintenance. Discard any FFPD that is damaged, dirty, or difficult to breathe through.

A2.6.3. Do not abuse or misuse the FFPD. Do not modify the FFPD in any way.

A2.7. Summary: We have discussed the proper fit, limitations and use of this FFPD. If there are any doubts about the environment you are about to enter with the FFPD, contact your supervisor or 8 MDOS/SGOAB at 782-4670 for clarification.