

CHAPTER 20. RESPIRATORY PROTECTION PROGRAM

2000. GENERAL. This chapter establishes minimum requirements for the acquisition and use of respirators under the requirements of the U.S. Department of Labor, Occupational Safety and Health Administration's (OSHA) Respiratory Protection Standard, 29 CFR 1910.134 and the corresponding standard for construction, 29 CFR 1926.103. The FAA Respiratory Protection Program (RPP) is designed to minimize occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays or vapors. The FAA will provide applicable and suitable respirators at no cost to FAA employees when such equipment is necessary to protect the health of the employee. Additional implementation guidance will be developed by responsible organizations to support this policy, and shall be followed.

2001. BACKGROUND. On January 8, 1998, OSHA published its revised respiratory protection standard and estimated that its strengthened requirements would provide additional protection to approximately 5 million workers who use respirators at one time or another in 1.3 million establishments nationwide. Within the FAA, respirators are worn periodically by employees in Airway Facilities, Aviation System Standards, Flight Standards Service, Aviation Medicine, the shops at the Aeronautical Center's Logistics Center, the Aircraft Certification Service, the Office of Accident Investigation, and in several other organizations. Emergency-use respirators (including programs for their use) have been established at certain Air Traffic facilities and at FAA research and toxicology laboratories.

2002. SCOPE. This chapter applies to all FAA personnel who are required to purchase (through facility acquisition procedures), maintain, or wear respirators. It also applies to employees providing or overseeing medical or training services to those using respirators. FAA contractors and sub-contractors are responsible for providing a RPP for their own employees. This chapter does not apply to pilot oxygen masks, which are covered by other applicable FAA regulations.

2003. GOALS AND OBJECTIVES.

a. The goal of the FAA RPP is to safeguard employees' health by preventing exposure to respiratory hazards in the workplace. This will be accomplished as far as feasible by accepted engineering control measures. When accepted engineering controls are not feasible, or while they are being instituted, appropriate respirators may be used as specified in this chapter and associated guidance. Respirators also may be used when there is no feasible alternative, often in an emergency situation, and only after procedures have first been established for their use and maintenance.

b. OSHA substance-specific standards, such as those for asbestos (29 CFR 1910.1001 and 29 CFR 1926.1101) and lead (29 CFR 1910.1025 and 29 CFR 1926.62), include additional specific requirements for the use of respiratory protection when these contaminants are present in the workplace.

2004. DEFINITIONS.

a. Air-purifying respirator. A respirator with an air-purifying filter, cartridge, or canister designed to remove specific air contaminants by passing ambient air through the air-purifying element.

b. Atmosphere-supplying respirator. A respirator that supplies the wearer with breathing air from a source independent of a contaminated atmosphere, including supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

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

d. Emergency-use/escape respirators. Respirators required for safe egress from a workplace that experiences an occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant resulting in employee exposure.

e. Employee exposure. Refers to the concentration of an airborne contaminant that would occur if the employee were not using a respirator.

f. Filter or air purifying element. A component used in respirators to remove solid or liquid aerosols from the inspired air.

g. 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.

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

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

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

k. Physician or other licensed health care professional (PLHCP). An individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by paragraph (e) of 29 CFR 1910.134.

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

m. 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.

n. Qualitative fit test. A pass/fail test to assess the adequacy of respirator fit that relies on the individual's response to a test agent.

o. Quantitative fit test. An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

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

q. Supplied-air respirator (SAR) or airline respirator. An atmosphere supplying respirator in which the breathing air is not designed to be carried by the wearer.

r. User seal check. A required action conducted by the wearer to determine if the respirator is properly seated to the face prior to entering the hazard area.

2005. KEY RESPIRATOR PROGRAM ELEMENTS. The program must be administered by a suitably trained program administrator (hereafter referred to as "program administrator.") The program

administrator shall be appointed in writing to administer overall implementation and oversight of the RPP for all applicable FAA lines of business, both at headquarters and in the regions/centers.

a. Written Respiratory Protection Program.

(1) Prior to an FAA employee wearing a respirator, a written, worksite-specific respiratory protection program ("written RPP") must be developed and implemented in accordance with the specific requirements of 29 CFR 1910.134. This plan must be updated as necessary to reflect those changes in workplace conditions that affect respirator use, and must contain at least the elements in paragraphs b through l below.

(2) Where respirator use is not required:

(a) If an employee requests a respirator that is not required, the FAA may provide a respirator, or permit the employee to use his/her own respirator, provided it has been determined that such respirator use will not in itself create a hazard.

(b) Except for dust masks, the FAA must implement those elements of the written RPP necessary to ensure that the employee is medically able to use the respirator, and that the respirator is cleaned, stored, and maintained so that its use does not present a health hazard to the user.

(c) The written RPP is not required to include those employees whose only use of respirators involves the voluntary use of filtering facepieces (dust masks).

b. Respirator Acquisition. Acquisition procedures shall be established to ensure that only respirators certified by the National Institute for Occupational Safety and Health (NIOSH) are purchased by the FAA for employee use. (Note: Surgical masks are not certified by NIOSH as respiratory protection.) Also, if respirators are purchased by employees for their voluntary use, Appendix D of the OSHA Respiratory Protection Standard requires that the respirators be NIOSH-certified.

c. Respirator Selection.

(1) Procedures must be developed to ensure that proper respirators are selected to protect employees to the extent required by the OSHA Respiratory Protection Standard or other OSHA substance-specific standard which requires respirator use.

(2) Respirator selection shall be based on an evaluation of all identified workplace, wearer, and equipment factors which affect required fit and performance in accordance with paragraph 1910.134(d) of the standard.

(3) The evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where the employee exposure cannot be estimated, the atmosphere shall be considered Immediately Dangerous to Life or Health (IDLH).

d. Medical Evaluation and Determination of Eligibility.

(1) A medical evaluation by a physician or other licensed health care professional (PLHCP) approved by Aviation Medicine shall be administered to an employee in accordance with 29 CFR 1910.134(e) to determine his/her ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace.

(2) The evaluation shall be administered confidentially during the employee's normal working hours.

(3) The PLHCP shall utilize the standard's medical questionnaire or a medical examination that obtains the same information as the medical questionnaire, and supplemental information as specified in the standard, in his/her evaluation.

(4) In determining an employee's ability to use a respirator, the program administrator shall obtain a written recommendation from the PLHCP regarding the employee's medical eligibility for respirator use, including any limitations on respirator use, or need for follow-up medical evaluations.

(5) If the respirator under consideration is a negative pressure respirator and a PLHCP has determined that use of the respirator could put an employee at increased risk, a powered air purifying respirator (PAPR) shall be provided to the employee, provided the PLHCP supports such use.

(6) Additional medical evaluations shall be performed if:

(a) An employee reports medical signs or symptoms that are related to medical eligibility for respirator use;

(b) The PLHCP, supervisor, or the program administrator determines that an employee needs to be reevaluated;

(c) Information from the RPP or related guidance, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation;

(d) Medical evaluations conducted by previous employers indicate a potential problem; or

(e) A change occurs in workplace conditions (e.g., physical work effort, temperature, humidity, exposure conditions, type/weight of respirator) that results in a substantial increase in the physiological burden placed on an employee.

e. Respirator Fit Testing. Before an employee may be required to use any respirator with a negative or positive pressure tight-fitting facepiece, the employee must be fit tested with the same make, model, style, and size of respirator that will be used (29 CFR 1910.134(f)). Written procedures for ensuring a proper facepiece seal must include the kinds of fit tests allowed, the methodology for testing, and how the results of the fit tests must be used. Fit-testing shall be repeated at least annually.

(1) Employees using a tight-fitting facepiece must pass an appropriate qualitative or quantitative fit, administered in accordance with OSHA-accepted protocols and procedures.

(2) Additional fit tests must be conducted whenever a different facepiece is used, or whenever the employee, PLHCP, supervisor, or the program administrator makes visual observations of changes in the employee's physical condition that could affect respirator fit, such as dental changes or an obvious change in body weight.

f. Respirator Use. Procedures shall be established and implemented to ensure proper use of respirators in accordance with paragraph 1910.134(g) of the standard. These procedures must include at least the following: prohibitions against conditions which may result in facepiece seal leakage, such as beards or other facial hair that will not allow a proper seal; requiring employees to perform user seal checks; preventing employees from removing respirators in hazardous environments; actions to take to ensure continued effective respirator operation throughout the work shift; and establishing procedures for the use of respirators in IDLH atmospheres, if applicable.

g. Maintenance and Care. A procedure must be established in accordance with paragraph 1910.134(h) of the standard for the cleaning and disinfecting, storage, inspection, and repair of respirators used by FAA employees.

h. Breathing Air Quality and Use. A procedure must be established for providing FAA employees using atmosphere-supplying respirators (e.g., supplied-air respirator and Self-Contained Breathing Apparatus (SCBA)) with compressed breathing air that meets at least the requirements for Grade D breathing air in accordance with the specifications in paragraph 1910.134(i) of the standard.

i. Identification of Filters, Cartridges, and Canisters. A procedure must be established to ensure that all filters, cartridges, and canisters used in the FAA workplace are labeled and color coded with the NIOSH approval label, and the label remains legible and intact.

j. Training.

(1) Supervisor Training. Supervisors shall be trained as necessary to support the RPP, and to ensure that employees are using their respirators in accordance with OSHA requirements.

(2) Employee Information and Training.

(a) Employees required to wear respirators, including those who may potentially wear respirators for emergency-use/escape, must receive annual training from instructors competent by training and experience to provide the training, and the training must impart an understanding of how to use respirators properly. Training may be more frequent under certain conditions specified in 29 CFR 1910.134(k)(5). The training should be given in non-technical language appropriate to the level of education, language proficiency, and experience of those being trained.

(b) Training shall conform to at least the elements specified in 29 CFR 1910.134k(1). To ensure that the training has been effective, before an employee is allowed to wear a respirator he/she must be able to demonstrate (1) an understanding of the training required, and (2) the ability to use the respirator properly. All training shall provide an opportunity to handle the respirator, have it fitted properly, test its face-to-facepiece seal, wear it in normal air for a long familiarity period, and finally, to wear it in a test atmosphere.

(c) When the voluntary use of any respirator is permitted (including dust masks), the employee must be provided the information contained in Appendix D of the OSHA standard.

k. Program Evaluation. Periodic inspections of the workplace, conducted in accordance with 29 CFR 1910.134(l), shall be performed by the program administrator to ensure that the written RPP is being properly implemented and that it continues to be effective. The program administrator shall also consult employees required to wear respirators to ensure they are being properly used.

l. Recordkeeping. The program administrator shall retain fit test records until the next fit test is administered, and a current copy of the written RPP. Records of employee medical evaluations shall be retained by Aviation Medicine and made available to employees and employee representatives in accordance with 29 CFR 1910.1020. Employee training records may be destroyed when 5 years old or when superseded or obsolete, whichever is sooner, in accordance with approved records retention standards in FAA Order 1350.15.