

CHAPTER 5 RESPIRATOR FIT-TESTING

- A. Introduction. Respirators do not work properly unless they fit the wearer. The quality of the respirator fit is determined by the seal where the respirator meets the wearer's face. Matching the wearer's facial features to the appropriate respirator size and style is critical. Most manufacturers provide several respirator styles in two or three sizes. Procedures for matching the appropriate respirator size and style to each user and testing the respirator seal are described in this chapter.
- B. Requirements.
1. Prior to fit testing a respirator, personnel must be trained and medically cleared to wear a respirator.
 2. Prior to an employee being required to use any respirator with a tight-fitting facepiece (includes filtering facepiece, unless exclusively for voluntary use), the employee must be fit tested with the same make, model, style, and size of respirator that will be used. Fit testing shall be repeated annually and any time a new make, model, style, or size of respirator is used.
 3. Quantitative fit testing (QNFT) is the preferred method of fit testing. This method requires specialized equipment and must be performed under the direction of a Coast Guard SEHO, industrial hygienist, or a properly trained safety and occupational health professional. Qualitative fit testing (QLFT) is an acceptable alternative if the required fit factor is 100 or less. QLFT must be performed using the isoamyl acetate (banana oil), saccharin solution or Bitrex™ (Denatonium Benzoate) methods described in enclosure (1). Irritant smoke (Stannic Chloride) is not authorized for fit testing procedures. The results of the fit test shall be used to select a respirator that provides an acceptable fit.
 4. Fit testing of all tight-fitting facepiece respirators will be conducted in the negative pressure mode. This includes respirators that will be used in a positive pressure or pressure-demand mode.
 5. QNFT or QLFT shall be done on an annual basis or whenever the wearer's facial features have changed sufficiently to reduce the quality of fit. Such changes include obvious changes in body weight, facial scarring, extensive dental work or cosmetic surgery. Fit testing may be required more often if stipulated by other Coast Guard or Federal regulations.
 6. Respirators shall not be fit-tested or used when conditions prevent a good face seal. Such conditions include facial hair in the facepiece sealing area and temple pieces of eyeglasses. Employees with these conditions shall not be fit-tested until the condition is corrected. This may require removal of the interfering condition, use of a respirator that does not require a face seal such as an air supplied hood or shroud (if allowed by the operation/exposure), or disqualifying the individual

from wearing a respirator. Employees shall not perform work operations requiring the use of a tight fitting facepiece respirator until a successful fit-test is performed. The corrected condition used during the fit testing must be in place during use of the respirator.

- C. Procedures. Enclosure (1) describes all fit testing procedures.
- D. Documentation. Enclosure (3), or a locally generated document that includes the same information, will be used to document fit testing results. For QNFT, a printed record that contains the same information is sufficient for documentation.