Respiratory Protection

Purpose

The purpose of Florida Gulf Coast University’s Respiratory Protection Safety Program is to enhance the protection of employee health by ensuring proper training, selecting and fitting of respirators, in accordance with the provisions of Title 29, Code of Federal Regulations (CFR), Section 1910.134, Respiratory Protection.

To the greatest extent possible, breathing air quality shall be controlled through the use of proper engineering, work practice, and administrative controls. When effective controls are not feasible or while they are being implemented, appropriate respiratory protection shall be used.

Scope

The Respiratory Protection Safety Program is designed for full time, part time, temporary and student employees who use respirators. These include, but are not limited to, half-masks, full facepiece respirators, powered-air-purifying respirators (PAPR), airline respirators, and self-contained breathing apparatus (SCBA), and filtering face pieces (except on a voluntary basis).

Definitions

A. **Respirator:** A device that protects employees from inhaling harmful substances. These substances can be in the form of airborne vapors, gases, dust, fogs, fumes, mists, smokes, or sprays. Some respirators also ensure that workers do not breathe air that contains dangerously low levels of oxygen.
   1. **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.
   2. **Powered Air-Purifying Respirator (PAPR):** An air-purifying respirator is one that uses a blower to force the ambient air through air-purifying elements to the inlet covering.
   3. **Supplied Air Respirator (SAR):** An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user. Also called an airline respirator.

B. **Qualitative Fit Test (QLFT):** A pass/fail test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.
Procedures/Requirements

A. **Selection of Respiratory Equipment:**
   1. Respirators shall be selected on the basis of the hazards to which the employee is exposed. The respirator shall be adequate to protect the health of the employee and to ensure compliance with all OSHA requirements. Respirator selection shall include consideration of the following factors:
      a. The type of respiratory hazard, including physical and chemical properties of the contaminant and its effect on humans.
      b. The concentration of the contaminant.
      c. The duration of exposure and the period of time respiratory protection is needed.
      d. The activities of the workers during exposure and respirator use.
      e. The characteristics, capabilities, and limitations of the various types of respirators.
      f. The protection factor assigned to the respirator.
   2. All respirators and particulate filters used at Florida Gulf Coast University (FGCU) shall be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in compliance with the conditions of its certification.
   3. For protection against gases and vapors, the air-purifying respirator shall be equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant. If there is no ESLI appropriate for the conditions, a change schedule for canisters and cartridges will be formulated based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life.

B. **Respirator Assignment and Use:**
   1. All FGCU employees must first receive proper training, fit testing and a current medical evaluation before wearing, or being assigned to wear, a respirator.
   2. Employees shall not wear a tight-fitting facepiece respirator whenever any condition exists which could affect the seal of the respirator or valve function (e.g., beards, sideburns, facial hair, missing dentures, skull caps, personal protective equipment, or eyeglass temple pieces that projects under the respirator.)
   3. Special spectacle kits or other devices shall be made available for individuals who wear corrective lenses, and who also must use a tight-fitting full-facepiece respirator.

C. **Where Respirator Use is not required:**
   1. An employee may request a respirator or be permitted to use their own respirator, where a respirator is not required, if Environmental Health & Safety
(EH&S) and the supervisor determines that such use in itself will not create a hazard.

2. If (EH&S) permits an employee to wear a respirator, other than a filtering face piece respirator, where not required, the employee will be included in all elements of the Respiratory Protection Safety Policy.

3. Voluntary use of a filtering face piece respirator.
   a. Employees may be fitted with filtering face pieces with N95, N99, or N100 capabilities.
   b. Employees will not be required to offer proof of medical ability to wear respirator.
   c. Employees must be provided with a written copy of the "Instructions for employees who request voluntary use of a respirator (Appendix D of this document).
   d. The department must maintain a signed copy documenting the employee has received and read the instructions that include the information for voluntary use of a respirator.

D. Training and Information:
   1. Employees will be trained such that they can demonstrate knowledge of at least:
      a. Why the respirator is necessary and how improper fit, use, or maintenance can compromise its protective effect.
      b. Limitations and capabilities of the respirator.
      c. Effective use in emergency situations.
      d. How to inspect, put on and remove, use and check the seals.
      e. Proper maintenance and storage.
      f. Recognition of medical signs and symptoms that may limit or prevent effective use.
      g. The general requirements of the OSHA standard.
   2. Training shall be provided prior to use.
   3. Retraining is required annually, and when:
      a. Changes in the workplace or type of respirator render previous training obsolete.
      b. Inadequacies are found in the employee’s knowledge or use.
      c. Other situations arise in which retraining appears necessary.

E. Program Evaluation:
   1. Employees are consulted during workplace evaluations and during annual training to assess their views on program effectiveness and to identify and correct any problems.

F. Recordkeeping:
Environmental Health & Safety
Administrative Services

1. Records of medical evaluations shall be retained in the individual’s personal medical records and made available in accordance with OSHA R325.3451-3476, “Employee Medical Records and Trade Secrets”.

G. **Medical Evaluations:**
   1. All employees, who will be expected to wear a respirator, either routinely or in an emergency situation, shall receive a medical evaluation at no cost to them. The licensed health care professional will determine whether the employee is physically able to wear a respirator. The medical evaluation shall be performed before the employee is initially fit-tested or required to use a respirator. Additional medical evaluations shall be provided if:
      a. An employee reports medical signs or symptoms that are related to their ability to use a respirator; or
      b. Information from the Respiratory Protection Program, including observations made during fit testing and program evaluation indicates a need for employee reevaluation; or
      c. The physician, health care professional, supervisor, or (EH&S) personnel determines an employee needs to be reevaluated; or
      d. A change occurs in workplace conditions (e.g., physical work effort, protective clothing use, and temperature) that may result in a substantial increase in the physiological burden place on an employee.
   2. The medical examinations shall consist of using a medical questionnaire and/or a medical examination to obtain the information required by OSHA. See Appendix C.
   3. Follow-up examinations shall be provided to employees whose initial medical examination demonstrates the need for a follow-up medical examination or as requested by the health care provider.
   4. The medical questionnaire and examinations shall be administered confidentially during the employee’s normal working hours or at a time and place convenient to the employee and in a manner that ensures the employee understands its content.
   5. Each employee will be given the opportunity to discuss the questionnaire and the examination results with the physician or licensed health care professional.

H. **Respirator Fit Testing:**
   1. (EH&S) shall ensure that employees using a tight-fitting facepiece respirator pass an appropriate qualitative fit test for each type of respirator he/she may be required to use.
   2. Respirator Fit Testing shall be conducted prior to the time of initial use of a tight-fitting facepiece respirator, whenever a different respirator facepiece (size, style, model, or make) is used, and at least annually thereafter for as long as the employee may be required to wear a respirator. Additional fit testing shall be
conducted whenever the employee reports or observations indicate changes in the employee’s physical condition (e.g., facial scarring, dental changes, cosmetic surgery, or change in body weight) that could affect respirator fit.

3. If, after passing a fit test, the employee notifies (EH&S), their supervisor or a health care provider that the respirator fit is unacceptable, the employee shall have the opportunity to select a different respirator facepiece and to be retested.

 Responsibilities

A. Supervisor:
1. Arrange initial respirator physical. The respirator physical will ensure that the employee is physically capable of wearing a respirator during work activities.
2. Contact (EH&S) to obtain the Medical Questionnaire for initial respirator physical.
3. Contact (EH&S) to determine type of respirator needed.
4. Arrange for purchase and payment of respirator physical, respirator, replacement parts, respirator cartridges, filters, and repairs.
5. Establish a clean, enclosed, personal cabinet or container for the employee to store their respirator when not in use.
6. Ensure employees under their supervision are using the required respirators appropriately.
7. Ensure that respirators that require repair be removed from service until the repair has been made or replaced, as needed.

B. Employee:
1. Wear the respiratory protection equipment provided, according to the instructions and training received.
2. Wear only the respirator trained upon and properly fitted to use.
3. Inspect, store, and maintain the respiratory protection equipment provided, according to the instructions and training received.
4. Report any change in health to the health care provider.
5. Report to (EH&S) if a change in physical characteristics alter the fit of the respirator.
6. Perform positive or negative pressure checks each time the respirator is put on, if using a tight-fitting respirator.
7. Inform the supervisors whenever there is a concern about the atmospheric conditions within a work area, so that the area can be evaluated, and respirators prescribed as necessary.
8. Inform the supervisor whenever a need for repair or replacement of issued respiratory protective devices is recognized.
9. Eliminate conditions, such as beard growth, long side burns or large mustaches, which could prevent a good facepiece-to-face seal or could interfere with the proper function of the respirator.

C. **Environmental Health & Safety Department:**
   1. Determine what (if any) respiratory protection devices are necessary to perform each routine or non-routine work activity conducted by their employees.
   2. Provide initial and annual training and fit-testing.
   3. Maintain documentation for employee who successfully completes the training to indicate that they have been fit tested and trained.
   4. Retain Fit test records until the next fit test is administered.
   5. Conduct evaluations of the workplace as necessary to ensure the provisions of this Respiratory Protection Program are being effectively implemented and that the program continues to be effective.

D. **Medical Practitioner:**
   1. Provide an initial medical evaluation to determine the employee’s ability to use a respirator, before the employee is fit tested or required to use the respirator in the workplace.
   2. Review the individual’s completed Medical Questionnaire annually to determine if employee needs to be seen for an examination.
   3. Provide a written recommendation regarding the employee’s ability to use the respirator to (EH&S).

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**Appendix D to Sec. 1910.134 (Mandatory)**

**Information for Employees**

**Using Respirators When Not Required Under the Standard**

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers 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 your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard. You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warning regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern.
   NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department
of Health and Human Services, certifies respirators. 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 it will protect you.

3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.

4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.