

	Environmental Health and Safety Manual	
	Policy Number: EH&S 7-2	
Title: Respiratory Protection Program		
Effective Date: 1994	Revision: 2/97	Number of Pages: 9

PURPOSE: To provide guidelines for protection against inhalation of respirable dusts, toxic gases, vapors, fumes, mists, and oxygen deficiency in the workplace. Respirators are to be used as a supplement to other methods of controlling airborne contaminants rather than as a substitute.

SCOPE: University wide.

PROCEDURES:

I. Responsibilities

A. Departments

1. Maintaining workplaces in order to minimize airborne contaminants.
2. Identifying operations, environments and/or materials that require evaluation for airborne contaminants. When contacting the Department of Environmental Health and Safety, the following information should be included: a description of the work being performed, the material(s) being handled, the amount of time expected to complete the operation, the estimated frequency of exposure, and the number of employees involved.
3. Implementing engineering and/or administrative controls where feasible.
4. Establishing an employee health surveillance program with a qualified health care provider. Workers are not to be assigned tasks requiring the use of respirators unless they have been medically cleared to wear a respirator. A respirator may not be worn until a written confirmation of the employee's ability to wear a respirator is received from the licensed physician. This written confirmation must be provided to the Department of Environmental Health and Safety. This must be done prior to an employee's first use of a respirator and on an annual basis thereafter. The department is responsible for assuming all costs related to the evaluation.
5. Coordinating a schedule of training and fit testing.

6. Purchasing the appropriate respiratory protection as specified or approved by the Department of Environmental Health and Safety.
7. Supervising the maintenance and provide storage for respirators.

B. Department of Environmental Health and Safety

Determine the need for employee respiratory protection. Specifically, the Department of Environmental Health and Safety is responsible for:

1. Evaluating the potential hazards.
2. Recommending engineering controls and administrative controls.
3. Selecting or approving respiratory protection.
4. Training in the selection and use of respiratory protection equipment.
5. Conducting Fit Tests for respirators.
6. Maintaining records of medical clearances, training attendance and fit test results.
7. Conducting periodic inspections and evaluations to determine the continued effectiveness of the program.

C. Employees

1. Obtain a medical evaluation and clearance from a licensed physician, and provide written confirmation to the department.
2. Attend mandatory respiratory protection training.
3. Use the assigned respirator when respiratory protection is required.
4. Inspect the respirator before each use to ensure that it is functioning properly.
5. Properly maintain and use the respirator in accordance with the training provided.
6. Return the respirator to supervision when it is no longer needed or requires

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maintenance.

D. Purchasing

1. All purchase requests for respiratory equipment must be forwarded to the Department of Environmental Health and Safety prior to purchasing the equipment.

II. Respirator Selection and Use

1. Selection of respirators and respirator accessories, fitting and testing must be coordinated through the Department of Environmental Health and Safety.
2. The Department of Environmental Health and Safety will evaluate the work area for chemical toxicity, the potential for exposure, the concentration and duration of exposure, and the limitation of the various types of respiratory protection that are available.
3. A respirator should never be worn before an evaluation has been made. Use of a respirator by an untrained individual, or in an application other than that for which it was designed, can prove extremely dangerous. In addition, a single respirator facepiece cannot be designed to fit the entire working population.

III. Medical Evaluation and Clearance

1. Medical evaluations shall be provided to all employees required to wear a respirator. The medical evaluations can be performed by the Center for Occupational and Environmental Medicine.
2. Medical evaluations will be conducted prior to initial use and annually thereafter. Medical evaluations shall be conducted by a licensed Physician.
3. Medical evaluations shall include:
 - a. A medical history, including previously diagnosed disease, particularly known cardiovascular or respiratory diseases

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- b. Psychological problems or symptoms including claustrophobia
 - c. Problems associated with breathing during normal work activities
 - d. Past problems with respirator use
 - e. Past and current usage of medication
 - f. Any known physical deformities or abnormalities, including those which may interfere with respirator use
 - g. Previous occupations
 - h. Tolerance to tachycardia produced by inhalation of heated air
 - i. Pulmonary function test (spirometry)
4. The following may disqualify an employee from wearing a respirator:
- a. Facial deformities and facial hair
 - b. Use of prescription eyeglasses when a fullface respirator is required, unless respirator includes corrective lenses
 - c. Perforated tympanic membranes
 - d. Respiratory diseases affecting pulmonary function
 - e. Symptomatic coronary artery disease, significant arrhythmias, or history of recent myocardial infarction
 - f. Endocrinal disorders which may cause the employee to suffer sudden loss of consciousness or response capability
 - g. Inability to perform coordinated movements and conditions affecting response and consciousness due to neurological disabilities
 - h. Use of medications that affect judgement, performance or reliability or alter the state of awareness or consciousness

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- i. A history of claustrophobia may require further evaluation
 - j. Any other condition which the physician believes might require special restriction
5. Documentation of medical clearance shall be provided by the employee to the affected department and to the Department of Environmental Health and Safety.

IV. Training and Fit Testing

1. Appropriate training and instruction in the proper use of each type of respirator is provided by the Department of Environmental Health and Safety.
2. Upon written receipt of medical clearance from a licensed physician, the employee will be trained and fit tested on the approved respirator(s).
3. Fit tests will be conducted at least annually.
4. A satisfactory face seal is a prerequisite for successful completion of the respiratory protection training program. Verification of the successful fit test will be documented on a Respirator Registration Form.
5. The Respirator Registration Form will be kept on file in the Department of Environmental Health and Safety.

V. Maintenance, Inspection, Storage and Repair

Maintenance, inspection and storage guidelines are provided in written form to all employees who attend training.

A. Inspection

1. The inspection of all respirators shall be performed before each use, and where applicable, shall include:
 - a. Checking facepiece for cuts, tears, frays or loss of elasticity.
 - b. Checking for damaged or missing hardware.

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- c. Checking for dust or dirt on valve seats or valve flaps.
 - d. Checking for missing or cracked valve covers.
 - e. Checking the elasticity of the headbands.
 - f. Inspecting the lens of the facepiece.
 - g. Checking threads, gaskets, and cartridges.
 - h. Checking hoses for cracks, cuts, or abrasions.
 - i. Checking regulator controls.
 - j. Checking backpack for dents or broken welds, and cylinder attachment.
2. A cleaning and disinfection program must be established for non-disposable type respirators.
 3. Respirators issued for the exclusive use of one worker should be cleaned after each day's use, or more often if necessary.
 4. Respirators used by more than one worker shall be thoroughly cleaned and disinfected after each use. It is recommended that respirators be assigned to individual workers for their exclusive use.

B. Storage

1. When not in use, respirators should be sealed in plastic bags and stored in a single layer with the facepiece and exhalation valve in a non-distorted position.
2. Respirators should be stored in a convenient, clean and sanitary location, avoiding temperature extremes and direct sunlight.

C. Repairs

1. Certain parts of the respirator can be changed by the employee, however repair or replacement of component parts must be done by a qualified individual.

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2. Substitution of parts from a different brand or type will invalidate the approval of the respirator.

VI. Special Problems

1. The respirator facepiece-to-face seal requires careful scrutiny to ensure that the inhalation of contaminants is being eliminated. An effective seal is difficult for individuals with standard prescription glasses, excessive facial hair, or absent dentures. Persons with atypical facial characteristics such as long faces, small faces and protruding noses may have difficulty in obtaining a successful seal. At present, commercial facepieces are produced to fit 95% of the male population.
2. Special arrangements may be necessarily investigated for personnel with fit problems (e.g. specular attachments for eyeglass wearers).

SUBJECT: Respiratory Protection Program	MANUAL CODE: 7-2
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INQUIRIES/REQUESTS: Environmental Health and Safety
110 Suffolk Hall
Zip 6200
Main Office: 632-6410
FAX: 632-9683

RELATED FORMS: *Respirator Certification*

RELATED DOCUMENTS: 29 CFR 1910.134 *Respiratory Protection*

ANSI Z88.2-1992 *Respiratory Protection*

ANSI Z88.6-1984 *Respirator Use - Physical Qualifications
for Personnel*

NIOSH *Respirator Decision Logic*

NIOSH *Certified Equipment List*

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I, _____ (Print Name), was issued the above respirator and agree to use it according to all provisions of the Respiratory Protection Program of SUNY at Stony Brook and the manufacturer's guidelines.

Signature

Date