

Title: Respiratory Protection Written Program
Effective Date: November 2005
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Issuing Authority: VP, Facilities and Construction Management
Responsible Officer: Director Environmental Health and Safety

PURPOSE OF THE WRITTEN PROGRAM

This document fulfills the requirement under OSHA 29 CFR 1910.134 to develop and maintain a written Respiratory Protection Program implementing procedures for selection of respiratory equipment, medical evaluations of employees required to use the devices, procedures for appropriate use, fit-testing procedures for tight-fitting respirators, procedures for cleaning/storing/inspecting the devices, training requirements and responsibilities.

SCOPE OF THIS WRITTEN PROGRAM

This written program covers all NYU staff and students who use tight fitting respirators to prevent airborne exposure to chemical and physical emissions in their breathing zone.

WHO NEEDS TO KNOW THIS WRITTEN PROGRAM

All New York University academic, commercial and residential facilities that use respiratory protection.

PROCEDURES FOR IMPLEMENTATION

Responsibilities:

Department of Environmental Health and Safety

The Director of the Environmental Health & Safety [EH&S] or designee will fulfill the responsibility of program administrator and be responsible for determining if and when personal respiratory protection is required as well as what type of protection is appropriate. The respirator program administrator has full authority to make necessary decisions to ensure the success of this program.

Determination of the need for personal respiratory protection shall be made following a hazard evaluation assessment coordinated by EH&S. The health hazard evaluation shall be initiated either as a result of a request to investigate a potential health hazard, to determine if respirators are needed, or as part of programmed inspections conducted by the department.

Prior to determining that personal respiratory protection is required in a particular area or for a specific process, all alternative means of eliminating or reducing exposure to a potentially hazardous compound shall be thoroughly investigated. Respirators will only be approved for use when no other means is feasible for eliminating or reducing exposure.

Upon completion of the hazard assessment, respirators shall be deemed necessary if the exposure level of the compound is found to be at or above the Occupational Safety and Health Administration (OSHA) permissible exposure level [PEL], or action level, where applicable. If no OSHA standard exists for the compound, the American Conference of Government Industrial Hygienists (ACGIH) threshold limit values [TLV] will be used as a guideline. Where standards or guidelines are not available, EHS will determine the need for respiratory protection based upon

the existing toxicological data for the chemical or substance of concern.

Directors or Department Chairs

Directors or Chairs must inform EHS of potential airborne hazards that would require a hazard assessment and possible use of tight fitting respirators. They must allow time for training and fit testing if their employees or students require tight fitting respirators to safely conduct their respective job tasks.

Facilities Manager, Department Manager, Construction Manager and Supervisors

Facility Managers must inform EHS of potential airborne hazards that would require a hazard assessment and possible use of tight fitting respirators. They must allow time for training and fit testing if their employees require tight fitting respirators to safely conduct their respective job tasks.

Maintenance and Housekeeping

Personnel

Maintenance staff who use tight fitting respirators must attend training, fit testing, and care for the respirator equipment as explained during respiratory protection training.

Medical Surveillance

1. Employees who are required to wear respirators or who choose to wear respirators (other than filtering face-pieces) shall be medically evaluated for fitness to wear a respirator. The medical evaluation shall take place before the employee is fit tested or required to wear a respirator. The medical questionnaire shall be confidentially administered, either at the worksite during normal working hours or at a time and place convenient to the employee. The employee will have the opportunity to discuss the questionnaire and examination results with the individual conducting the evaluation. NYU employees will not wear respirators unless medical clearance has been issued. The questionnaire can be obtained from EHS at ehs@nyu.edu.
2. For any employee giving a positive response to any question, or whose initial medical examination demonstrates the need for a follow-up medical examination, the follow-up medical examination shall include any medical tests, consultations, or diagnostic procedures that the medical examiner deems necessary to make a final determination. These exams will be given at no cost to the employee.
3. A recommendation will be obtained in writing from the examining physician or licensed healthcare professional [LHP]. This document will assess the employee's ability to wear a respirator and shall include the following:
 - a. Limitations on respirator use related to the medical condition of the employee or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator.
 - b. Need for follow-up medical evaluations.
 - c. A statement that the physician or LHP has provided the employee with a copy of the written recommendation.
4. In the event an employee is found to have a medical condition that would preclude the use of a negative-pressure respirator, the physician or LHP will determine whether the employee may wear a powered air-purifying respirator instead. If the physician or LHP determines that the employee may wear a powered air-purifying respirator, NYU will provide one. If on a subsequent examination the same employee is found to be capable of wearing a negative-pressure respirator, the University will no longer provide the powered air-purifying respirator.
5. Additional medical evaluations will be provided if the following occurs:
 - a. An employee reports medical signs or symptoms that are related to ability to use a respirator.
 - b. A physician, LHP, supervisor or the program administrator determines that an employee needs to be

- re-evaluated.
 - c. Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicate a need for employee reevaluation.
 - d. A change occurs in workplace conditions that may result in a substantial increase in the physiological burden placed on an employee
6. Each physician or LHP who provides medical evaluation services for NYU employees will be provided with a copy of the entire written respiratory protection program and of §1910.134, including appendices.

UNIVERSITY WRITTEN PROGRAM

RESPONSIBILITIES

Fit Testing:

1. Before any employee may be required to use a respirator with a tight-fitting face-piece, whether negative or positive pressure, that employee must be fit tested with the same make, model, style, and size of respirator that will be used. Employees will be fit tested prior to initial use of a respirator, and annually thereafter.
2. Additional fit testing shall be conducted whenever the following occurs:
 - a. A different size, style, model, or make of face-piece is used
 - b. The employee reports changes in his or her physical condition that could affect respirator fit, such as scars, dental changes, cosmetic surgery, or obvious changes in body weight (gain or loss).
 - c. The employer, physician, LHP, supervisor, or program administrator visually observes changes in the employee's physical condition, such as those detailed above, that may affect respirator fit.
3. If, after passing a fit test, the employee notifies the program administrator, physician/ LHP, or supervisor that the fit of the respirator is unacceptable, the employee will be given the opportunity to select a different respirator face-piece and undergo another fit test
4. The fit test shall be administered using an OSHA-accepted qualitative fit test (QLFT) or quantitative fit test protocol (QNFT). QLFT may only be used to fit test negative pressure air-purifying respirators that must achieve a fit factor of 100 or less.
5. Fit testing of tight-fitting atmosphere-supplying respirators and tight-fitting powered air-purifying respirators will be performed in the negative pressure mode.
6. The fit factor that must be achieved for tight-fitting face-pieces may be found in the substance-specific standard for some chemical substances. For others, average workplace concentrations determined by monitoring are divided by the PEL or TLV to determine the required fit factor. If the fit factor required is 100 or less, respirator fit may be determined by an OSHA-approved qualitative fit test (QLFT) method. If the fit factor required is greater than 100, an OSHA-approved quantitative fit test method must be used.

General Principals of Respirator Use:

In order to maximize the protection provided to employees by a respirator and minimize the likelihood of occupational illnesses and injuries arising from airborne exposures and from respirator use, NYU has established procedures for proper respirator use.

1. Tight Fitting Face-pieces
 - a. Employees who are required to wear respirators with tight-fitting face-pieces may not wear facial hair, including beard stubble, that comes between the face-piece seal and the face, or that interferes with valve function.
 - b. Employees who are required to wear respirators with tight-fitting face-pieces whose facial structure changes, through significant weight gain or loss, cosmetic or oral surgery, or other factors, must undergo fit testing before they are permitted to work in areas where tight-fitting respirators are required.
 - c. Employees who wear corrective eyewear shall be trained to do so in a manner that does not interfere either with the respirator seal or with visual acuity.
 - d. Employees who are required to wear other protective equipment that may interfere with the respirator must refer to the site-specific procedures for guidance on proper use.
 - e. Employees who are required to wear respirators with tight-fitting face-pieces shall perform a user seal check each time they put on the respirator, using an approved and effective method.
2. Continuing Respirator Effectiveness
 - a. Work area conditions, including the degree of employee exposure and stress, shall be continually monitored. Changes that may affect respirator effectiveness will result in a re-evaluation of the respirator program for a given area.
 - b. Employees will leave the respirator use area to wash their face and face-pieces as necessary to prevent eye or skin irritation or if they detect vapor or gas breakthrough, changes in breathing resistance, leakage of the face-piece, to replace the respirator, filter, canister or cartridges. If the respirator or cartridge/filtering device are spent, the employee will not re-enter the area unless the respirator or parts are replaced or repaired.

Maintenance and Care of Respirators

1. Cleaning and Disinfecting
 - a. Respirators provided to employees shall be clean, sanitary, and in good working order.
 - b. Respirators shall be cleaned and disinfected by the employees who use them after each use, or when applicable if worn for short periods of time. Respirators issued to more than one person will be cleaned and disinfected before being worn by different individuals. Respirator used for fit testing or training will be cleaned and disinfected after each use.
2. Storage
 - a. All respirators will be stored in respirator bags, and in a manner to protect against damage, contamination, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals.
 - b. The respirators must be packed or stored to prevent deformation of the face-piece and exhalation valve.
3. Inspection
 - a. All respirators used during normal work activities must be inspected before and after each use as well as during cleaning.
 - b. Respirators designated for emergency use only must be inspected on a monthly basis, according to the manufacturer or after each use.
 - c. Emergency escape-only respirators must be inspected before they are taken into the workplace for use.

Identification of Filters, Cartridges and Canisters

The department head or designee will ensure that all filters, cartridges and canisters used in the workplace are labeled and color-coded for the appropriate contaminate.

1. Must be NIOSH-approved
2. Must not be removed
3. Must remain legible until discarded

Training and Information

1. All employees who are required to use respirators, either routinely or in foreseeable emergencies, will be trained in the proper use of their respirator. Training will address putting on and removing the respirator, limitations on respirator use, and respirator maintenance. Training will be provided before the employee begins work in an area where respirator use is required.
2. Retraining will be administered annually. In addition, retraining will be conducted if the following occurs:
 - a. Changes in the workplace or the type of respirator render previous training obsolete.
 - b. Inadequacies in the employee's knowledge or use of the respirator indicate the employee has not retained the requisite understanding or skill.

Program Evaluation

EH&S will evaluate the Respiratory Protection Program in effect in a specific area or for a specific process on a periodic basis to ensure the effectiveness.

Non-mandatory Respirator Use:

1. Each supervisor in the affected area(s) will ensure that any employee using a respirator voluntarily is medically evaluated and determined capable of wearing the device. The area supervisor will also make sure that the individual is properly trained on use, care, limitations, maintenance and storage of the device so that the use of the respirator does not present a health hazard to the user
2. Each employee using a tight fitting respirator voluntarily will receive initial Respirator Training and initial fit testing.
3. Each employee using a tight fitting respirator voluntarily will be given the OSHA Appendix D Mandatory Information for Employees Using Respirators When Not Required Under the Standard

RELATED POLICIES

NYU Environmental Health and Safety Policy

RELEVANT RESOURCES

OSHA 29 CFR 1910.134