

Louisiana State University

Office of Facility Services

Operating Instruction 4006

Revision: 3
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SUBJECT: RESPIRATOR PROTECTION PROGRAM

I. General

- A. In compliance with LSU Policy Statement 19 (PS-19), the following procedures are established in accordance with the requirements of OSHA 29CFR 1910.134 and the American National Standards Institute's Standard of Respiratory Protection, ANSI.Z8802.
- B. It is the policy of the Office of Facility Services to provide its employees with a safe and healthy work environment. The guidelines in this operating instruction are designed to reduce employee exposure to occupational air contaminants and oxygen deficiency. The primary objective is to prevent excessive exposure to these contaminants. This is accomplished as much as it is feasible by engineering and work practice control measures. While these controls are being implemented or evaluated, respiratory protection may be required to achieve this goal. In these situations, respiratory protection is provided at no cost to employees.

II. Responsibilities

Directors

- A. Directors will, through supervisory staff, be responsible for ensuring that proper equipment and training is provided for the personnel within their departments and that these respiratory procedures are implemented.

Assistant Directors/Managers

- A. The assistant directors and managers of each area are responsible for ensuring that personnel within their departments are trained and comply with the respiratory protection requirements, conduct workplace and procedure evaluations and establish work practice controls to meet the objectives of this policy.

Employees

- A. It is the responsibilities of the employee to have an awareness of the respiratory protection requirements for their work areas. Employees are also responsible for wearing the appropriate protective equipment according to proper instructions, and for maintaining the equipment in a clean and operable condition.

Program Administrator

- A. The Assistant Director of Environmental Maintenance is the Respiratory Protection Program Administrator and has complete responsibility for the administration of the Facility Services Respiratory Protection Policy. This individual has the authority to act on all matters relating to the operation and administration of the respiratory protection program. They are responsible for monitoring or conducting workplace evaluations; developing standard operating procedures; maintaining records and conducting program evaluations. All departments within Facility Services will cooperate with the Program Administrator to the fullest extent.

Office of Environmental Health & Safety (OEHS)

- A. This department will provide oversight and auditing assistance to the Facility Services Respiratory Protection Program.

III. Respiratory Protection Program

Voluntary Use of Respirators

- A. Voluntary respirator use applies in those situations where employees are not exposed to hazardous agents above the permissible exposure limits, they are not emergency responders or they are not required by procedure.

The voluntary users should refer to information in Appendix B- "Information for Employees Using Respirators When Not Required Under the Standard." (attached)

Medical Evaluation

- A. Every employee who is being considered for inclusion in the Respiratory Protection Program must participate in a medical evaluation. Each employee will complete a mandatory medical evaluation questionnaire which will be reviewed by the medical staff at the Student Health Center.
- B. The Student Health Center medical staff or other designated health care provider will complete a mandatory medical evaluation questionnaire advising the Program Administrator of the type(s) of respirators the individual is/is not medically qualified to wear. If additional medical testing or evaluation is recommended by the medical staff, the Program Administrator will coordinate the required testing.

Respirator Selection

- A. All respiratory protection devices must be NIOSH approved.
- B. Selection of the proper respirator is based on the physical and chemical properties of the air contaminants and the concentration level likely to be encountered by the employee. Guidance in the selection of the proper respirator is available from OEHS.
 - 1. A workplace and procedure evaluation will be conducted by performing a Job Safety Analysis to determine the respirator (Appendix A-attached)
 - 2. Purchasing of respirators should be coordinated through the Program Administrator to ensure uniformity of parts.
 - 3. No employee may enter a known Immediate Danger to Life and Health (IDLH) atmosphere unless to perform life rescue. In this case, two (2) persons are required with two (2) standby personnel similarly equipped.

Fit Testing of Respirator

- A. Individuals whose job assignments require the use of a respirator will ensure that nothing interferes with the facial seal on the mask. This includes facial hair, temple bars on glasses, etc.

- B. Proper fit testing of the respirator will be performed annually or more frequently if changes in the employee's seal occur. Fit testing will be performed using one of the methods specified in the OEHS Manual. This will be performed after:
 - 1. The employee has been determined to be medically qualified
 - 2. The employee has been trained and provided an opportunity to handle and wear the respirator

- C. Each time the respirator is worn, the employee is to perform a fit check which tests the seal and integrity of the respirator prior to being used.

- D. Fit tests should be documented in the EHS office records by the Assistant Director of Environmental Maintenance.

Use of Respirators

- A. Tight fitting respirators will not be used with beards, facial hair or any other conditions that prevent direct contact of the face and the edge of the respirator or interferes with valve function.

- B. Employees are required to leave the contaminated area:
 - 1. upon malfunction of the respirator
 - 2. upon detection of leakage of contaminant into the respirator
 - 3. if increased breathing resistance of the respirator is noted
 - 4. if severe discomfort in wearing the respirator is detected
 - 5. upon illness of the wearer, including sensation of dizziness, nausea, weakness, breathing difficulty, coughing, sneezing, vomiting, fever or chills

6. To wash face to prevent skin irritation
 7. To change filter/cartridge elements or replace respirators whenever contaminant-warning properties are detected or increased breathing resistance is detected
- C. The use of defective respirators is not permitted and only parts designed by the manufacturer shall be used for repair.
- D. Prior to using a respirator, the user shall inspect the respirator for the following:
1. Proper cartridge/filter selection for the hazard
 2. Head straps and buckles for breaks, tears, holes, cracking and loss of elasticity
 3. Inhalation and exhalation valves for proper operation and seating
 4. Face piece for holes, cracks, loose lens, and seal condition
 5. Hose lens or breathing tubes should be checked for cracks, tight connections, and elasticity
 6. Supplied air respirators should be checked for:
 - a. Proper breathing air quality (Grade D Compressed Breathing Air)
 - b. Proper air supply pressure for the respirator (each respirator model has specified ranges for medium and maximum air supply pressure)
 - c. Hose condition and connections
 - d. Adequate volume of supplied air for the duration of the job
 - e. NOTE: Breathing air should not be supplied from a source that has other uses. Supplied air respirators shall have a dedicated cylinder or compressor for their supply of Grade D breathing air

E. Respirator Cleaning, Maintenance and Storage

1. Respirator cleaning will be carried out according to the instructions of the manufacturer and/or guidelines established by NIOSH
2. Personnel assigned respiratory equipment will wash, disinfect, rinse and dry their assigned respirators
3. After cleaning and drying, the respirator shall be stored in assigned storage lockers in such a manner to prevent contamination and distortion of mask

F. Training

1. Prior to use of a respirator, employees shall be trained in its use, maintenance and limitations
2. The Assistant Directors/Managers of the employees who use respirators will ensure that individuals are trained in the following areas prior to respiratory use
 - a. necessity of respirator
 - b. how to properly fit and maintain respirator
 - c. capabilities and limits of respirators
 - d. how to effectively use respirators, including emergency situations
 - e. how to inspect, wear, remove and perform seal checks of respirator
 - f. how to recognize medical signs and symptoms of exposure that may limit effective use
 - g. proper cleaning, maintenance and storage of respirators

3. Annual refresher training shall be conducted by the Program Administrator for all employees who use respiratory protection. Additional training shall be conducted if incidents occur that indicate the necessity for more training
4. Documentation of training will include the individual's name, date and employee ID number; Program Administrator will maintain records
5. OEHS is available to assist with training program

G. Program Evaluation

1. The Program Administrator will conduct occasional evaluations of work sites to ensure that the written respiratory protection program is properly implemented and that proper record keeping is maintained
2. Employees shall be consulted as to the effectiveness of the program and to identify any issues
3. Factors to be assessed include:
 - a. respirator fit (including the ability to use the respirator without interfering with effective workplace performance)
 - b. appropriate respirator selection for the hazards to which the employee will face
 - c. proper respirator use under the workplace condition the employee encounters
 - d. proper respirator maintenance, storage and cleaning procedures
4. Results of the evaluations will be maintained by the Program Administrator and corrective actions documented

APPENDIX A

JOB SAFETY ANALYSIS

Description of Job Task:

Department:

Completed by: _____ Phone: _____ Date: _____

Personal Protective Equipment:

Types of Energy Isolation:

| Job Step | Description of Step in Proper Sequence | Potential Hazards | Preventive or Protective Measures | Comments |
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APPENDIX B

Voluntary Use of Respirators

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 employees.

However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Employees may elect to wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. When wearing respirators, it is the employee's responsibility to take certain precautions to ensure that the respirator itself does not present a hazard by performing the following actions:

1. Read and follow all instructions provided by the manufacturer on use, maintenance, cleaning, care and warnings regarding the respirators and limitations.
2. Ensure that the respirator is certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the US Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or on respirator packaging. It will explain what the respirator is designed for and how much protection it will provide.
3. Do not wear the respirator into an atmosphere containing contaminants for which the filter dust particles will not protect against gases, vapors or very small solid particles of fumes or smoke.
4. Maintain and store the assigned respirator in a secure location.
5. Do not use a respirator assigned to another person.