

DHHS POLICIES AND PROCEDURES

Section V:	Human Resources
Title:	Safety and Benefits
Chapter:	Respiratory Program Requirements Policy
Current Effective Date:	5/1/09
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Purpose

To provide a mechanism for the selection of respiratory protection, the training of employees in their use, requirements for the use, care, cleaning and disposal of respiratory protective equipment.

Policy

Division/facility/school directors shall ensure all department employees receive respiratory protection information and training as required by OSHA 1910/1926 Industry and Construction Standards.

Definitions

For additional definitions see the Department of Health and Human Services (DHHS) Policy, Establishment of the Safety and Health Program Policy.

1. **Air Contaminant** - substances listed in 13 NCAC 7F.0101(a)(4), Tables Z-1, Z-2, and Z-3; specific substances listed in the standards contained in Subpart Z; and similar hazardous substances which may be reasonably expected to be suspended in the breathing air of an environment.
2. **Air Purifying Respirators** - respirators which draw ambient air through the air purifying element to remove air contaminants:
 - A. **Negative Pressure Respirator** - a respirator that fits tightly to the face, where ambient air is drawn through the air purifying element by the pressure of the inhalation of the wearer, creating a lower air pressure inside the facepiece than the outside air.
 - B. **Positive Pressure Air-Purifying Respirator, (PAPR)** - a respirator where ambient air is drawn through the air purifying element by a motor or similar device and pumped into the facepiece, creating a greater air pressure inside the facepiece than the outside air.

3. **Atmosphere Supplying Respirators** - respirators which provide air to the wearer from a source other than the ambient air, such as an air cylinder or air compressor.
 - A. **Self-Contained Breathing Apparatus, (SCBA)** - an atmosphere supplying respirator where the breathing air is designed to be carried by the user.
 - B. **Supplied Air Respirator, (SAR)** - an atmosphere supplying respirator where the breathing air is supplied through an airline.
4. **Canister, Cartridge** - a container with a filter, sorbent, catalyst, or combination which removes specific contaminants from air passed through the container.
5. **Exposure** - the potential or actual exposure to a concentration of air contaminants that would occur if the employee were not using respiratory protection.
6. **Fit Factor** - a quantitative estimate of the fit of a particular respirator to a specific individual, which typically estimates the ratio of the concentration of a substance in the ambient air to its concentration inside the respirator when worn.
7. **HEPA Filter** - a high efficiency particulate air filter approved by NIOSH under 40 CFR Part 84.
8. **Immediately Dangerous to Life and Health, (IDLH)** - an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from the environment. For the purposes of this policy, potential oxygen deficient atmospheres are IDLH.
9. **Particulates** - air contaminants which are in solid or liquid states, such as dusts, fumes, mists, fibers, and/or radon detectors.
10. **Particulate Respirator** - means a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. The three (3) levels of filter efficiency are 95%, 99%, and 99.97%. The three (3) categories of resistance to filter efficiency degradation are labeled N (*Not* resistant to oil), R (*Resistant* to oil), and P (oil *Proof*). Particle filters are those that capture airborne solid particles and liquid mists
11. **Permissible Exposure Limit, (PEL)** - the maximum concentration of an air contaminant to which a worker is allowed to be exposed, in accordance with Table Z1 of 13 NCAC 7F.0101 and the stated exposure limits in 29 CFR Part 1910 Subpart Z.

12. **Parts per Million, (PPM)** - a measurement of the parts of an air contaminant per million parts of air.
13. **Milligrams per Cubic Meter.(mg/m³)**
14. **Fibers per cubic centimeter.(f/cc)**
15. **Micrograms per cubic meter.(ug/m³)**
16. **Environments/Tasks Requiring Respirators** - an atmosphere or a job task which is likely to expose an employee to one or more of the following:
 - A. Concentrations of air contaminants may be at or greater than the Permissible Exposure Limits established by 29 CFR 1910 Subpart Z.
 - B. Oxygen content of less than 19.5% or greater than 23.5%.
 - C. Asbestos in a friable state or lead in an airborne state.
17. **Likely to Expose** - where potential exposure is established by testing, or where conditions indicate the possibility of exposure but no testing has been performed.
18. **Oxygen-Deficient** - less than 19.5% oxygen in the atmosphere.

Roles and Responsibilities

1. Division/Facility/School Director:

Each Division/Facility/School Director with employees who are required to use respirators to perform job duties and/or who elect to allow Voluntary Use of a Respirator shall appoint a Respirator Program Coordinator.

2. Respirator Program Coordinator:

The Respirator Program Coordinator shall develop in writing a Respirator Protection Plan and specific operating procedures in conformance the policy set forth above.

3. Supervisors/Managers:

Each supervisor/manager and employee shall comply with the requirements of this policy and where applicable, with the associated Respiratory Protection Plan and division/facility/school Respirator Program.

4. DHHS Safety Manager:

The DHHS Safety Program Manager shall develop a means to determine the effectiveness and compliance of each Division/Facility/School Respiratory Protection Program through periodic reviews. Additionally, the Safety Program Manager shall provide consultative services and training for Respirator Program Coordinators as requested on an as needed basis.

Implementation

1. Respirators and respirator use is prohibited within the department, except in the following circumstances:
 - A. When entry into environments or performance of tasks requiring respirators is essential to the performance of an employee's job duties, engineering controls can not eliminate the hazard(s), and the division/facility/school develops and implements a Required Use Respirator Program; or
 - B. When the division/facility/school develops and implements a Voluntary Use Respirator Program.
2. Where a Division/Facility/School develops a Required Use Respirator Program, it shall conform to the following:
 - A. A Respirator Program Coordinator shall be appointed, and shall be granted the authority and trained to perform the following duties:
 1. Oversight of the respirator program(s).
 2. Evaluation of program effectiveness and practice.
 3. Procurement of respirators and filtering media.
 4. Any other duties outlined in the Respirator Program.
 - B. The Respirator Program Coordinator shall perform an annual review of the Division/Facility/School Respirator Protection Program to determine the effectiveness. Such review shall include the following at a minimum:
 1. Observations of employees using respirators to ensure compliance with the requirements of the program.

2. Review of the fit test records.
 3. Ensure completion of a review of medical evaluations and medical questionnaires in conformance with applicable privacy laws.
 4. Notification of affected staff for changes to the program.
- C. The Respirator Program Coordinator shall ensure written certification of employee training is maintained. A copy of this certification shall be made immediately available upon request to duly authorized agents/inspectors of the Division/Facility/School, Department and regulatory agencies.
- D. The Respirator Program Coordinator shall develop a Required Use Respirator Programs in writing. Such program shall include, at a minimum, the following elements:
1. A list of the environments and tasks requiring the use of respirators, including the level and type of risk and the type of respirator required for each.
 2. A list of employees, by either name or job classification, authorized for respirator use.
 3. The name of the Respirator Program Coordinator(s) responsible for the plan, with authorization to perform all activities required by this policy and the plan.
 4. Specific operating procedures for:
 - a. The procurement of the appropriate type(s) and number of respirators and filtering media.
 - b. The selection by each authorized employee of the proper make and size of respirator.
 - c. The proper disinfection, cleaning and storage of each type of respirator.
 - d. The fit testing of a respirator for each authorized employee.
 - e. The ongoing medical screenings for each authorized employee.

- f. The training of each authorized employee, including the curricula to be used, the authorized trainers and the creation, maintenance and storage of training records.
 - g. The routine use of each type of respirator designated in the plan.
 - h. The monitoring of the practices required in the plan.
 - i. The annual evaluation of the effectiveness of the plan, including procedures to make changes where deemed necessary and for the approval of revisions by the division/facility/school director.
- E. Where a Division/Facility/School develops a respiratory protection program it shall also develop a written plan and procedures for the specific use of each type of respirator including:
- 1. A schedule of inspection and required maintenance in accordance with the manufacturer's guidance or Appendix B of 29 CFR 1910.134.
 - 2. A filter media change out schedule for respirator canisters to be used with gases or vapors where no end of service life indicator is present on the mask.
 - 3. Method for identifying and evaluating the respiratory hazard(s) in the workplace. This evaluation shall include a reasonable estimate of employee exposures to respiratory hazards and an identification of the contaminant's chemical state and physical form. Such methods shall use the worst case scenario, and where the employee exposure cannot be determined the atmosphere will be considered IDLH.
- F. Employees shall be given a medical screening utilizing 29 CFR 1910.134, Appendix C (Mandatory Medical Questionnaire) before being allowed to wear a respirator. Medical questionnaire and examinations shall be administered during the employee's normal working hours and/or at a time and place convenient to the employee.
- G. Fit testing of respirators shall conform to the following requirements:
- 1. Employees shall receive initial fit testing prior to wearing a respirator in the performance of job duties.

2. Employees shall receive annual fit testing.
 3. Fit testing recordkeeping shall be maintained for initial and annual fit testing and include the following elements as a minimum:
 - a. Employee's name
 - b. Type of fit test performed
 - c. Make, model, style and size of respirator
 - d. Date of the fit test
 - e. Results of the test
 4. Employees shall not be allowed to use a respirator if they fail fit testing procedures.
 5. Records of the fit testing shall be retained until after the next fit test of the employee or the annual review of the program; whichever is longer.
- H. Respirator training shall conform to the following:
1. Employees shall receive training prior to using a respirator.
 2. Employees shall receive annual training on respirator usage.
 3. Respirator training shall include at a minimum:
 - a. The reason respirator use is necessary.
 - b. The means to identify when a respirator is required.
 - c. How to properly fit, use and maintain the respirator.
 - d. Limitations and capabilities of the respirator.
 - e. Proper means to inspect, don, remove, use and check the respirator.
 - f. Proper procedures for cleaning, maintenance and storage of the respirator.

- g. Establishing an inspection and maintenance schedule.
 - h. Medical signs and symptoms that indicate a potential problem for respirator use.
 - i. Use of the respirator in emergency situations to include respirator malfunctions.
 - j. Employee responsibilities under this policy and the respirator program.
4. Respirator training records shall be maintained and include the following as a minimum:
- a. Employees name.
 - b. Date of training.
 - c. Types of respirators for which the employee was trained.
 - d. Employee signature certifying that instructions and information was received and understood.
 - e. Signature of the trainer.
5. Respiratory training records shall be maintained for the period the employee is engaged in tasks requiring the use of a respirator, plus 30 years by transferring the records into the employees personnel file.
6. The following specific procedures shall also apply to the respiratory protection program:
- a. Employees conform to the requirements of the respiratory protection plan at all time during use.
 - b. Respirators in use shall be NIOSH approved.
 - c. Employees shall maintain respirators in a clean and sanitary condition.

- d. Employees shall be provided with a copy of 29 CFR 1910.134, Appendix C (Mandatory Medical Questionnaire) during initial training.
 - e. A schedule of inspection and required maintenance shall be maintained by the Respiratory Program Coordinator.
 - f. Respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture and damaging chemicals (i.e. in plastic bags).
 - g. Respirators shall be packed and stored to prevent deformation of the facepiece and exhalation valve.
- I. Where a Division/Facility/School develops a respiratory protection program it shall also develop a Voluntary Use Respirator Programs in writing and shall include, at a minimum, the following elements:
- 1. A statement that the program is only applicable for the use of a tight fitting (N95/P95 or above) respirator and does not include the use of “dust mask” particulate respirators for protection from nuisance particulates, and only where a determination has been made that respirator use is not required.
 - 2. Specific operating procedures for:
 - a. Employees to request and be approved for Voluntary Respirator Usage.
 - b. The presentation to authorized employees of the information contained in 29 CFR 1910.134 Appendix D.
 - c. The proper cleaning, maintenance and storage of respirators covered under the voluntary use respirator program.
 - 3. No employee shall don or use a respirator of any kind for the performance of job duties unless all of the requirements of the Required Use or Voluntary Use Respirator Program have been met.

4. Employees authorized to use respirators shall:
 - a. Conform to the requirements of this policy and the specific Division/Facility/School Respirator Protection Plan at all times during use.
 - b. Be clean shaven at all times the respirator is worn, unless the respirator is a powered positive pressure air purifying or air supplying respirator with no tight-fitting facial seal.
5. All respirators used by the department shall be labeled as approved by NIOSH and used in accordance with the guidance found in this policy.

References

North Carolina General Statutes:

1. Chapter 95: Occupational Safety and Health Act of North Carolina: 95-129(2) and 95-148(1) and (2)
2. Chapter 143, Article 63: Workplace Requirements Program for Safety and Health: 143-582(1) through (4) and (6)

North Carolina Administrative Code:

1. 25 NCAC 1N.0105(a) and .0202-.0206
2. 13 NCAC 7F.0101(4)

North Carolina Occupational Safety and Health Standards for General Industry:

1. 29 CFR 1910.134
2. 29 CFR 1910.139
3. 29 CFR 1910 Subpart Z

American National Standard for Respiratory Protection - Respirator Use, Z88.2-1992

American National Standard for Respiratory Protection - Respirator Use - Physical Qualifications for Personnel, Z88.6-1984

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North Carolina State Employees' Workplace Requirements Manual for Safety and Health:

1. Section 2: Policy 2.2: Requirements 3.c., 3.d., 4.a., and 4.b.
2. Section 5: Policy 5-17 and 5-18

For questions or clarification on any of the information contained in this policy, please contact [Human Resources](#). For general questions about department-wide policies and procedures, contact the [DHHS Policy Coordinator](#).