



# RESPIRATORY PROTECTION PROGRAM

Compliant to 29 CFR § 1910.134

**NEW MEXICO STATE  
UNIVERSITY**

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Environmental, Health  
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# NMSU RESPIRATORY PROTECTION PROGRAM

## I. Purpose

The purpose of this program is to preserve the health of personnel by preventing exposure to harmful levels of air contaminants or areas of low oxygen content. Where feasible, exposure to hazardous environments will be eliminated by the application of engineering controls, (e.g., enclosure or isolation of the operation, ventilation) or administrative controls (e.g., use of less hazardous materials, limiting time in hazardous environment). When these controls are not feasible, suitable respiratory protection must be provided.

## II. Responsibilities

### A. NMSU Environmental Health and Safety (EH&S)

EH&S will conduct training and fit testing in order to qualify users prior to wearing respirators and annually thereafter. Technical assistance such as air sampling and analysis may be conducted by staff Industrial Hygienists, Safety Specialists, or Safety Officers.

### B. Supervisor

The supervisor is responsible for ensuring that all personnel under his/her control have a received all applicable training and fit testing prior to performing work requiring respiratory protection and annually thereafter. Additionally, this person is responsible for providing respiratory protection for his/her employees at no charge to the employee. The supervisors responsibility includes evaluation of the job, task, or area conditions for engineering/administrative controls feasibility or use of respiratory protection.

Supervisors may contact EH&S for assistance in evaluating air contaminants and determining the proper respiratory protection. As appropriate an operational supervisor may be designated to oversee respiratory safety for specific projects.

### C. Participants and Users

Participants are responsible for maintaining an awareness of the respiratory protection requirements for their jobs or work area. In addition, all participants are responsible for the inspecting, wearing, and maintenance of assigned respiratory equipment.

### D. NMSU components - branch campuses, research areas and institutes

As needed, a person at a site other than the NMSU main campus will be designated as coordinator for EH&S respirator training and fit testing for that site. The designatee will be provided assistance with training and fit testing by EH&S and will coordinate the program at that site for EH&S.

Individual components of NMSU may develop and administer a separate respiratory protection program for their work area, provided that the program complies with 29CFR1910.134 and fulfill the objectives of NMSU Environmental Health and Safety Policy. Copies of their Respiratory Program and training records will be submitted annually to EH&S to ensure regulatory compliance and workplace safety.

### III. ADMINISTRATION

A. EH&S will provide classroom training and qualitative fit testing in a chamber, utilizing negative pressure full or half-face air purifying respirators (APR).

B. Fit testing of atmosphere supplying respirators (e.g.: SCBA or airline) or powered air purifying respirators may be accomplished using a qualitative fit test of a tight fitting negative pressure respirator per 29 CFR 1910.134 (f)(8) for those individuals who may use supplied air respirators.

C. EH&S will maintain a training and respirator fit test database, and issue a Fit Test Record and card to trained individuals. Off campus respiratory coordinators and NMSU components with separate programs will submit copies of their Respiratory Program and training records at least annually to EH&S to ensure regulatory compliance and workplace safety.

### IV. BASIC RESPIRATORY PROTECTION PROGRAM

This program complies with 29 CFR 1910.134, the "Revised Respiratory Protection Standard". Specifically, the program complies with 29 CFR 1910.134 ( c ) requiring the employer NMSU (New Mexico State University) to develop and implement a written respiratory protection program, and paragraph (k) requiring annual respirator user training and fit testing. Additionally, this program complies with applicable sections of 42 CFR 84, "Public Health, Approval of Respiratory Protective Devices", paragraphs (k) and (l) for air purifying respirators and chemical cartridge use. Excluded from the program is the use of "dust masks" as defined under 29 CFR 1910.134( c)(2)(ii) which is not required to be a part of the program.

Under Occupational Safety and Health (OSHA) regulations, only equipment listed and approved by the Mining Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH) may be used for respiratory protection.

#### A. Respirator Selection

The selection of the type of negative-pressure, air-purifying respirator and filter media is made according to the type and concentration of air contaminants. Material Safety Data Sheets (MSDS) should be consulted first to make this determination. Supplied breathing air respirators, airline or SCBA, are required for IDLH atmospheres.

#### B. Respirator Availability

The supervisor or designee will make a respirator available to each new hire or transferee participating in any activity requiring respiratory protection. That person(s) will provide replacement respirators, filters, and cartridges available as needed and will replace worn respirator parts with parts designed for that same unit. Same brand filters and cartridges as the respirator will be used.

#### C. Personnel Training and Fit-Testing

1. Each employee assigned duties requiring the use of respiratory protection shall complete the respiratory protection questionnaire and submit the information for a physician's evaluation of ability to wear respiratory protection devices. Medical physicians or practitioners must provide written approval of the employee's fitness to use respiratory protection before training and fit testing is conducted. The evaluation questionnaire may be obtained from EH&S or from the NMSU EH&S internet website (<http://safety.nmsu.edu>).
2. A EH&S representative or qualified trainer will conduct training and fit testing to instruct personnel in proper respirator fit which shall include demonstration and practice on how the respirator should be worn, adjusted, and how to determine proper fit. Each respirator user shall have a respirator of correct size, proper fit, test its face piece-to-face seal, wear it in normal air for a long familiarity period, and, finally, wear it in a test atmosphere.
3. In addition, each individual upon assignment to a respirator area, will be briefed by his/her supervisor relative to the respirator program and the work to be done. The respirator Qualitative Fit Test card will be reviewed for his/her job for the work conditions. If a different respirator than the one indicated will be required, retraining and refitting will be conducted by EH&S for that respirator.
4. A written change out schedule for cartridge replacement will be developed, implemented and maintained by the Supervisor or designee for respirator use.
5. Respirators must not be worn when conditions prevent an adequate face seal. A fit test will not be conducted if conditions exist which could compromise the face-respirator seal. Such conditions include a full beard, side burns or moustache extending into the respirator seal, scalp hair inside the seal area, or temple bars of eye glasses that extend through the sealing edge of the face piece.
6. Employees who wear respiratory protection must be retrained and fit tested annually. Attendance at a NMSU Hazard Communication Class is also required, if respiratory protection is for harmful chemical vapors or fumes.

D. Respirator Inspection and Maintenance

1. Respirator users shall inspect units before and after each episode of use, and periodically spot check for fit, use, and condition.
2. The user, in coordination with his/her supervisor, is responsible for ensuring the respirator is maintained in serviceable condition.
3. Trained users are responsible for cleaning their respirators according to the manufacturer's instructions or department policy for respirators which are not discarded after single use. Alcohol or other solvents should not routinely be used to clean respirators.
4. Individually assigned respirators not discarded after one episode of use shall be marked or stored in such a manner as to assure they are worn only by the individual to whom they are assigned.
5. Individually assigned respirators not discarded after one episode of use shall be stored in a clean, sanitary container away from areas of contamination, sunlight,

extreme heat, extreme cold, or excessive moisture. Respirators shall be stored so that the face piece and exhalation valve rest in a normal position (face up).

6. Respirators assigned to be used by more than one employee shall be cleaned and disinfected prior to subsequent use by another employee. Lukewarm water and iodine solutions are recommended.

7. Repairs or adjustments to respirators failing an inspection shall be made only by appropriately trained persons. Only NIOSH approved manufacturer's parts for the respirator shall be used.

#### E. SUPPLIED AIR RESPIRATORY EQUIPMENT

This section is for use of supplied air respirators such as Self Contained Breathing Apparatus (SCBA) and Airline Supplied Respirators .

The full facepiece SCBA and airline respirators are available and will be used only by trained personnel when it is necessary to enter hazardous atmospheres. The following points pertain to use of this equipment.

1. EH&S representative or qualified trainer will fully train all potential users and inspectors in the use and inspection of this equipment.
2. When the equipment is used, it will be tested in an uncontaminated atmosphere prior to entering the hazardous area if possible.
3. An individual will not work alone with this apparatus in a hazardous atmosphere. A second individual suitably equipped with a similar breathing apparatus and other rescue equipment must maintain visual, voice, or signal line communications with the first individual and must be available and capable of rendering assistance if necessary. The operation supervisor must plan so that the second individual will be unaffected by any likely incident
4. Trained users will clean and disinfect respiratory equipment after each use.
5. Respiratory equipment will be inspected after each episode of use and monthly by the user(s). Inspections shall ensure that air cylinders are fully charged and the regulator and warning devices function properly. Inspection and maintenance information will be recorded in a log book.
6. All supplied air must meet CLASS D requirements for breathing air.

#### F. FIRE FIGHTER REQUIREMENTS

1. All firefighting personnel must perform their duties as specified by the additional interior structural firefighting requirements listed in 29 CFR 1910.134(g)(4). At least two employees entering the IDLH atmosphere will remain in visual or voice contact at all times.
2. At least two employees are located outside the IDLH atmosphere for rescue and communications if needed.

3. All employees engaged in interior structural firefighting will use SCBAs.

## G. MONITORING

In an effort to assure program adequacy and to provide for a continuing healthful work environment for the participants, monitoring operations will be conducted on a periodic basis. EH&S personnel may spot check work areas where respiratory protection is worn to evaluate program effectiveness.

Three types of monitoring comprise the medical aspects of this program.

1. Evaluations or medical examinations will be conducted by a qualified physician on all prospective participants to ensure they are physically fit and able to perform assigned tasks while using respiratory protection equipment prior to fit testing or assignment. This examination is one-time only unless employee health or work conditions change significantly in which case re-evaluation may be necessary.
2. If deemed necessary, periodic physical examinations may be given to regular employees in order to assist them in maintaining their health while using respiratory protection equipment on-the-job.
3. The user's department will provide all personnel working with hazardous chemicals an opportunity to receive medical attention if they develop signs and/or symptoms associated with exposure to a hazardous material. All medical examinations and consultations will be performed by a licensed physician.

Note: Revision March 10, 2017 – Approved by Environmental Health & Safety