

Respiratory Protection Program



California State University, Chico

Department of Environmental Health and Safety

Table of Contents

1.0 Introduction	1
1.1 Purpose	1
1.2 Scope	1
1.3 Program Administrator	1
2.0 Responsibilities	2
2.1 Program Administrator (Environmental Health and Safety)	2
2.2 Supervisor Responsibilities	2
2.3 Employee Responsibilities	2
3.0 Processes	3
4.0 Medical Evaluations	4
4.1 Initial Evaluation	4
4.2 Follow-Up Evaluations	4
4.3 Additional Evaluations	4
5.0 Fit Testing Procedures	6
5.1 Fit Assessment and Fit Test Exercises	6
6.0 Respirator Selection and Use	7
6.1 General Requirements to Follow when Selecting a Respirator	7
6.2 Respirator Use.....	7
6.3 Filter Cartridge Selection	8
7.0 Voluntary Use (Non-Wildfire Event)	9
7.1 Voluntary Use of Half- or Full-Face Negative-Pressure Respirators.....	9
7.2 Voluntary Use of Filtering Facepiece/Dust Masks	9
8.0 Respirator Use (Wildfire Event)	10
8.1 Voluntary Use of Filtering Facepiece for Protection from Wildfire Smoke.....	10
8.2 Mandatory Use of Respirator for Protection from Wildfire Smoke	10
9.0 Maintenance of Respirators	11
9.1 Storage.....	11
9.2 Cleaning and Disinfecting	11
9.3 Inspection of Defects	11
10.0 Training	12
11.0 Recordkeeping	13
11.1 Medical Evaluations.....	13
11.2 Health Status Medical Report	13
11.3 Fit Tests.....	13
12.0 Program Evaluation	14

Appendix:

Appendix A:

- Respirator and Fit Assessment and Fit Testing Procedures Forms (CSU, Chico).....Page 15

Appendix B:

- Mandatory Language for Voluntary.....Page 17

Appendix C:

- Mandatory Language for Protection for Wildfire Smoke.....Page 19

REVISION PAGE

Respiratory Protection Plan Record of Revisions

Revision	By	Date	Description of Revision
1	HS	6/18/18	Slight language change; added Supervisor and Employee responsibilities language; reorganized and consolidated sections; added sections (Recordkeeping, Training, Program Evaluation); removed sections (Respirator for Emergency Use, Additional Information, Fit Testing Techniques)
2	HS	08/14/19	Reorganized Section 1.0 Introduction to include "Purpose" "Scope", and "Program Administrator". Added sections 3.0 "Processes"; 6.3.1 Filter Change Schedule table; Section 7.0 "Voluntary Use of Respirators for Wildfire Smoke"; "Appendix A, B and C". Added language regarding physician's written opinion and no cost to employees. Added language to Section 4.0 Medical Evaluation; reorganized and added language to Section 5.0 "Fit Testing Procedures".
3	HS	10/8/20	Updated types of respirators allowed for use.

Legend:

HS: Holly Swan, Industrial Hygienist/Environmental Programs Manager

1.0

INTRODUCTION

It is the goal of California State University, Chico (the “University”) to maintain, insofar as is reasonably possible, an environment that will not adversely affect the health, safety, and wellbeing of students, employees, visitors, and the surrounding community. To this end, the University has established a Respiratory Protection Program.

1.1 Purpose

The purpose of this manual is to provide guidance to employees who will be using respirators and to meet the requirements specified in California Code of Regulations, Title 8, Section 5144. The manual will assist in safeguarding health and life through proper selection, use, and care of respirators.

1.2 Scope

The Respiratory Protection Program applies to all University employees who may, in the course of their employment, work in atmospheres that require the use of a respirator to protect their health. At the University, a respirator is defined as an air purifying respirator. No other types of respirators (air or atmosphere supplying) are permitted. Employees are required to follow the guidelines and procedures set-forth in this manual. Employees should read this manual carefully and questions regarding the contents of this manual should be brought to the attention of their immediate supervisor.

1.3 Program Administrator

The regulation requires that a Program Administrator be assigned. The Program Administrator for the University is the current Industrial Hygienist on campus or the Director of Environmental Health and Safety if the Industrial Hygienist position is vacant.

2.0

RESPONSIBILITIES

2.1 Program Administrator (Environmental Health and Safety)

- Develop, implement, and update as necessary a written Respiratory Protection Program.
- Provide initial and annual respirator training which will include use, maintenance, storage, limitations and capabilities.
- Conduct initial, annual, and other required fit tests for employee's who utilize respiratory protective equipment.
- Coordinate medical evaluations for employee's required to use a respirator.
- Conduct inspections, upon request, for respiratory equipment usage, maintenance, and storage.

2.2 Supervisor Responsibilities

- Identify those employees that may need respiratory protective equipment.
- Notify Program Administrator of the need for respiratory equipment for individual employees.
- Notify Program Administrator if there are any changes to work environments that may present new respiratory hazards.
- Purchase respirators, filters, cartridges, and respirator cleaning supplies.

2.3 Employee Responsibilities

- Utilize the issued respirator in accordance with instructions and training provided by Program Administrator.
- Ensure proper respiratory maintenance such as storage, cleaning and disinfecting.
- Notify supervisor if there are any changes to health that may prevent respiratory protector's effectiveness.

3.0

PROCESSES

Prior to an employee ever donning a respirator, a medical examination by a physician or health care provider must be performed. A medical examination is conducted to determine if the employee is capable to wear a respirator safely. More information on the medical examination process can be found in Section 4.0 of this Plan.

Upon passing the medical examination, the Program Administrator will conduct training on the Respiratory Protection Program and how to select, use, and maintain a respirator. More information on what the training entails can be found in Section 9.0 of this Plan.

Upon completion of employee training, the Program Administrator will conduct a fit test. Employees must bring their designated respirator to the fit test. More information of the fit test process can be found in Section 5.0 of this Plan.

Upon passing the medical examination, training of the Respiratory Protection Program, and the fit test, the employee may then use their respirator.

4.0

MEDICAL EVALUATIONS

Using a respirator may place a physiological burden on employees that varies depending on the type of respirator worn, the job and workplace conditions in which the respirator is used, and the medical status of the employee. Because of this, it is the University's responsibility to provide medical evaluations to determine the employee's ability to use a respirator. Each employee whose duties require the use of a respirator is required to complete a medical examination by a physician or other licensed health care professional (PLHCP) before using a respirator. Medical evaluations will be performed confidentially, at no cost to the employees, and during normal working hours.

4.1 Initial Evaluation

An initial medical evaluation is required before the employee is fit tested or required to use a respirator in the workplace. The medical examination will consist of a Respirator Medical Evaluation Questionnaire and satisfactory completion of a pulmonary function test. A copy of the Respirator Medical Evaluation Questionnaire is available by contacting Environmental Health and Safety (EHS) at 898-5126. After the medical evaluation the PLHCP will submit a Health Status Medical Report (also known as a Physicians Written Opinion) to EHS. The employee has the right to discuss the questionnaire and examination results with the PLHCP.

The Physicians Written Opinion will relay to the University the employee's ability to use the respirator and provide the following information:

- Any 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;
- The need, if any, for follow-up medical evaluations; and
- A statement that the PLHCP has provided the employee with a copy of the PLHCP's written recommendation.

4.2 Follow-up Evaluations

A follow-up medical examination will be provided for any employee who gives a positive response to any question among questions 1 through 8 in Section 2 of Part A of the Respirator Medical Evaluation Questionnaire. The follow-up medical examination will include any medical tests, consultations, or diagnostic procedures that the PLHCP deems necessary to make a final determination

4.3 Additional Evaluations

In addition to the original medical evaluation, additional medical examinations shall be conducted if any of the following exist:

- An employee reports medical signs or symptoms that change their ability to use a respirator.
- A doctor, supervisor, or respirator Program Administrator informs the employee they need to be re-evaluated.

- Information from the Respiratory Protection Program, including observations made during fit testing and program evaluation indicates a need for employee re-evaluation.
- A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

5.0

FIT TESTING PROCEDURES

It is only when a respirator fits properly that it protects the employee. Many different factors can affect the fit of the respirator, such as face shape, facial hair, eyeglasses, missing teeth, and certain skin conditions. In addition, facial hair or any facial condition that interferes with the proper seal of the respirator to the face will not be permitted to wear a respirator and a fit test will not be conducted.

When an employee requires a fit test, the employee must provide their designated respirator for use during the test (or at a minimum, be the same make, model, style, and size of respirator that will be used). A pre-fit assessment, fit testing exercises, and a qualitative test will be performed. This will be done prior to use, annually, and whenever a different respirator facepiece (other than the make, model and size of respirator that an employee was originally fit tested on) is used.

Additional fit tests will be required if the employee, employee's supervisor, Program Administrator, or PLHCP reports a visual observation of changes in the employee's physical condition that could affect respirator fit. Some conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight. If an employee does not pass the fit test, they will be provided a respirator of different make, model, or size.

5.1 Fit Assessment and Fit-Test Exercises

The respirator must be donned and worn prior to the start of the fit test. During this time, assessment on the comfort and adequacy of fit of the respirator will be conducted.

The respirator must then be worn for 5-minutes before fit testing exercises begin. A positive and negative pressure check, and a qualitative test will be performed as part of the fit testing protocol. Qualitative fit testing is a pass or fail test that relies on the sensory response of the individual being tested to detect the agent being introduced. The protocol outlined by Cal/OSHA for respirator fit testing is followed using an irritant smoke.

Appendix A of this Plan outlines the fit assessment and fit-test exercises.

6.0

RESPIRATOR SELECTION AND USE

At the University, only air purifying respirators will be used. If conditions exist where there is the possibility that air supplied respirators are necessary, emergency personnel will respond appropriately. Respirators and filter cartridges will be given to employees at no cost. Respirators will not be allowed to be worn by employees who have facial hair that comes between the sealing surface of the facepiece and the face or that interferes with the valve function.

6.1 General Requirements to Follow when Selecting a Respirator

- The supervisor or manager shall identify hazards in the workplace. This evaluation shall demonstrate a reasonable estimate of employee exposure to respiratory hazard(s) and an identification of the contaminant's properties.
- Respirators must be worn based on the hazard to which the worker is (or has the potential to be) exposed to, the workplace and the possibility of the work performed to affect the respirator's reliability.
- The respirator selected shall be appropriate for the chemical state and physical form of the contaminant.
- Respirators shall be National Institute for Occupational Safety & Health (NIOSH) certified and shall be used according to manufacturer's recommendations.
- Air-purifying respirators are not designed to be in any atmosphere that is immediately dangerous to your life or health; where oxygen is less than 19.5% or greater than 23.5%; or with unknown contaminants.

6.2 Respirator Use

Improper use of a respirator may result in the decline of an individual's health. If there is a change in work area conditions or degree of employee exposure of stress that may affect the respirators effectiveness, consult with EHS to determine the continued effectiveness of the respirator.

Before using a respirator, check for cleanliness, and signs of wear, tear, and other damage. Perform a seal check each time a respirator is put on by either a positive or negative pressure check.

6.2.1 Positive Pressure Check

Positive pressure check requires the user to block the exhaust port(s) with the palm of the hand and exhale gently into the facepiece to cause a slight positive pressure inside the facepiece. If the facepiece bulges slightly, and no air leaks are detected between the face and the facepiece, then a proper fit has been obtained.

6.2.2 Negative Pressure Check

Negative pressure check requires the user to block the intake ports with the palm of the hand and inhale for five to ten seconds. If the facepiece collapses slightly and no air leakage is detected between the face and the facepiece, a proper fit has been obtained.

Employees should leave the respirator use area if during the following events:

- To wash faces and respirator facepieces as necessary to prevent eye or skin irritation associated with respirator use;
- If detection of vapor or gas occurs, changes in breathing resistance, or leakage of the facepiece; and
- To replace the respirator or filter cartridge.

Employees will not be allowed to return to the respirator use area until the respirator or filter cartridge is repaired or replaced if any of the following occurs.

6.3 Filter Cartridge Selection

When selecting a respirator filter cartridge, be aware that each cartridge is made to filter out a specific contaminant or a combination of contaminants. Always check the written description on the cartridges to ensure the filter selected is appropriate for the respiratory hazards present.

For protection against particulates, an air purifying respirator equipped with a filter certified by NIOSH under 30 CFR Part 11 as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator with a filter certified for particulates by NIOSH under 42 CFR Part 84 must be utilized.

6.3.1 Filter Cartridge Change Schedule

If an expiration date is printed on the filter cartridge or packaging, never use past printed expiration date. The date a filter cartridge package is opened should be recorded. Filter cartridges should be changed out per manufacturer's recommendation and technical data as summarized in Table 6.2 below.

Filter Type	Change Schedule
Particulate filters (P100)	When filter becomes damaged, soiled, or breathing becomes difficult
CP3N	After every use
Organic Vapor or Organic Vapor/P100 combo	Whichever comes first: After 8 hours of use, every 6 months, or if you smell or taste a chemical

Table 6.2 Filter Change Schedule

7.0 VOLUNTARY USE (NON-WILDFIRE EVENT)

An employee may voluntarily use a respirator as long as their workplace atmosphere will not exceed permissible exposure limits as defined in Table AC-1 of Title 8, Section 5155.

7.1 Voluntary Use of Half- or Full-Face Negative-Pressure Respirators

If a supervisor provides a half- or full-face negative-pressure respirator for voluntary use, or if an employee provides their own, certain precautions must be followed to ensure that the respirator itself does not present a health hazard. To ensure that the respirator itself does not present a health hazard, a medical evaluation will be performed, the employee must be trained and fit tested, and these guidelines in Appendix D of Title 8, Section 5144 (found in Appendix B of this plan) must be adhered to.

7.2 Voluntary Use of Filtering Facepiece/Dust Masks

A filtering facepiece, also known as a dust mask, may be worn at any time where an employee feels necessary to protect against particulates (i.e. in dusty conditions). No medical evaluation, training or fit test is required for an employee to wear a dust mask; however, the employee must abide by the guidelines of Appendix D of Title 8, Section 5144 found in Appendix B of this plan.

8.0 RESPIRATOR USE (WILDFIRE EVENT)

An emergency regulation (Title 8, Section 5141.1) was adopted on July 29, 2019, to protect employees from small particulate matter ("PM2.5") caused by wildfire smoke.

8.1 Voluntary Use of Filtering Facepiece for Protection from Wildfire Smoke

When the air quality index ("AQI") for PM2.5 is greater than 150, but does not exceed 500, the University will make available filtering facepieces ("N95 mask") for voluntary use to "covered employees". A covered employee is defined as an employee who, for more than one hour per shift, works outside or in a building which is unenclosed or does not provide filtered air. Covered employees are not required to wear a N95 mask but are encouraged to do so.

All employees who are covered under this standard are required to read and adhere to Appendix B of Section 5141.1 (found in Appendix C of this plan). No medical evaluation or fit test is required; however, a Wildfire Smoke-specific training is required. An employee must not wear any other type of respirator other than a N95 mask if they are not currently enrolled in the Respiratory Protection Program.

8.2 Mandatory Use of Respirator for Protection from Wildfire Smoke

When the current air quality index for PM2.5 exceeds 500, respirator use is required in accordance with section 5144. Respirators will have an assigned protection factor such that the PM2.5 levels inside the respirator correspond to an AQI less than 151.

Any employee who will be required to wear a respirator to protect themselves from particulate matter during a wildfire smoke event must be enrolled into the Respiratory Protection Program prior to wearing a respirator. This includes having a medical evaluation, fit test, and training. See Section 3.0 of this plan for more information.

9.0 MAINTENANCE OF RESPIRATORS

The responsibility for maintaining respirators is with the employee. The maintenance and care of respirators includes inspecting for defects, cleaning and disinfecting, and storage.

9.1 Storage

All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, moisture, and damaging chemicals. Respirators shall be packed or stored to prevent deformation of the facepiece and exhalation valve. A loose plastic zip lock bag can be used to store respirators. Do not store your respirator in the trunk of your car.

9.2 Cleaning and Disinfecting

As necessary, the employee shall clean and disinfect the respirator using detergent and a disinfecting agent. During this operation, it is also a good opportunity to examine the respirator and check for damage. Respirators should be cleaned and disinfected as often as necessary to be maintained in a sanitary condition using the procedures below or procedures recommended by the respirator manufacturer.

1. Remove filters or cartridges. Discard or repair any defective parts.
2. Wash components in warm water (110°F; 43°C maximum) with a mild detergent or with a manufacturer recommended cleaner. A non-wire stiff bristle brush may be used to facilitate the removal of dirt.
3. Rinse components in warm (110°F; 43°C maximum) running water.
4. When the detergent being used does not contain a disinfecting agent, respirator components should be immersed for 2-minutes in a hypochlorite solution made by adding approximately 1 milliliter of bleach to one liter of warm water (110°F; 43°C).
5. Rinse components thoroughly in warm (110°F; 43°C maximum) running water.
6. Components should be hand-dried with a clean lint-free cloth or air-dried.
7. Reassemble respirator and test the respirator to ensure its proper function.

9.3 Inspection for Defects

Before each use, inspect equipment for defects, signs of wear, or damage. This process requires a check of the respirators function, tightness of connections, condition of the facepiece, head straps, connecting tube, and filters; and a check of elastomeric parts for pliability and signs of deterioration. If repairs or adjustments need to be made to respirators that have the potential for affecting the effectiveness of the respirator, bring the respirator to the EHS for inspection.

10.0

TRAINING

It is the responsibility of EHS to train employees who are required to wear a respirator before first use of a respirator, annually thereafter, and when the following occur:

- Changes in the workplace or the type of respirator render previous training obsolete;
- Inadequacies in the employee's knowledge or use of the respirator; or
- Any additional situation that may arise in which retraining appears necessary to ensure proper respirator use.

Training will consist of the following:

- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;
- What the limitations and capabilities of the respirator are;
- How to use respirator effectively, including in situations in which the respirator malfunctions;
- How to inspect, put on and remove, use, and check the seals of the respirator;
- What the procedures are for maintenance and storage of the respirator; and
- How to recognize medical signs and symptoms that may limit the effectiveness of respirators;
- And the general requirements of the regulation.

Training will be provided at no cost to employees.

11.0

RECORDKEEPING

11.1 Medical Evaluations

The Respirator Medical Evaluation Questionnaire is maintained by the PLHCP. Both must be kept on file for 30-years after separation from the University per Section 3204 of Title 8 of the California Code of Regulations.

11.2 Health Status Medical Report

The Health Status Medical Report that is provided to EHS by the PLHCP will be kept on file at the EHS office.

11.3 Fit Tests

Fit test records must be kept on file until a new fit test is completed. Fit test records will be kept at the EHS office.

12.0

PROGRAM EVALUATION

The Respiratory Protection Program will be evaluated for effectiveness, as necessary, by administering a questionnaire to those who are enrolled in the Program.

Appendix A

Respirator Fit Assessment and Fit Testing Procedures Form

California State University, Chico

Environmental Health and Safety

RESPIRATOR QUALITATIVE FIT TESTING

Name _____ Date _____

Department _____ Employee ID _____

Fit Test: ____ Initial ____ Annual

Respirator Type _____

NIOSH/MSHA TC No. _____
(Manufacturer, Model, Size)

Respirator Type _____

NIOSH/MSHA TC No. _____
(Manufacturer, Model, Size)

Assessment of Comfort

- | | |
|---------------------------------------|--|
| 1. Position of mask on the nose _____ | 3. Room to talk _____ |
| 2. Room for eye protection _____ | 4. Position of mask on face and cheeks _____ |

Assessment of Adequacy of Fit

- | | |
|---------------------------------|-------------------------------------|
| 1. Chin properly placed _____ | 4. Proper size _____ |
| 2. Adequate strap tension _____ | 5. Tendency to slip _____ |
| 3. Fit across nose bridge _____ | 6. Self-observation in mirror _____ |

Testing Protocol

- | | |
|--------------------------------------|--|
| 1. Wear for 5 minutes _____ | 6. Talking (Rainbow Passage) _____ |
| 2. Breathing normally (1 min.) _____ | 7. Grimace (15 sec.) _____ |
| 3. Breathing deeply (1 min.) _____ | 8. Bending over (1 min.) _____ |
| 4. Turning head (1 min.) _____ | 9. Breathing normally (1 min.) _____ |
| 5. Nodding head (1 min.) _____ | 10. Positive/negative pressure check _____ |

Type of Qualitative Test _____ **Pass** **Fail**

Respirator Fitted By _____

Appendix B

Mandatory Language for Voluntary Use of Respirators (Appendix D of Title 8, Section 5144)



Department of Environmental Health and Safety

Voluntary Use of Respirators (Including Dust Masks)

Cal/OSHA Appendix D to Section 5144: (Mandatory) 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 workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators (including dust masks) for your voluntary use, or you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designated to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

***If you have any questions, please contact the
Department of Environmental Health and Safety at 5126***

Appendix C

Mandatory Language for Protection from Wildfire Smoke (Appendix B of Title 8, Section 5141.1)



Department of Environmental Health and Safety
Employee Protection from Wildfire Smoke

Cal/OSHA Appendix B to Section 5141.1: (Mandatory) Protection from
 Wildfire Smoke Information to Be Provided to Employees

Note: This Cal/OSHA standard is only applicable when the current Air Quality Index (AQI) for small particulate matter (PM2.5) exceeds 150 and only covers employees who work outside or in non-filtered buildings and vehicles for more than one hour per shift.

(1) The health effects of wildfire smoke.

Although there are many hazardous chemicals in wildfire smoke, the main harmful pollutant for people who are not very close to the fire is “particulate matter,” the tiny particles suspended in the air. The smallest, and usually the most harmful, particulate matter is called PM2.5 because it has a diameter of 2.5 micrometers or smaller. Particulate matter can irritate the lungs and cause persistent coughing, phlegm, wheezing, or difficulty breathing. Particulate matter can also cause more serious problems, such as reduced lung function, bronchitis, worsening of asthma, heart failure, and early death. People over 65 and people who already have heart and lung problems are the most likely to suffer from serious health effects.

(2) The right of obtain medical treatment without fear of reprisal.

Employers must have effective provisions made in advance for prompt medical treatment of employees in the event of serious injury or illness caused by wildfire smoke exposure.

(3) How to obtain the current Air Quality Index for PM2.5.

Various government agencies monitor the air at locations throughout California and report the current Air Quality Index (AQI) for those places. The AQI is a measurement of how polluted the air is. An AQI over 100 is unhealthy for sensitive people and an AQI over 150 is unhealthy for everyone. Although there are AQIs for several pollutants, Cal/OSHA’s regulation about wildfire smoke only uses the AQI for PM2.5. The easiest way to find the current and forecasted AQI for PM2.5 is to go to www.AirNow.gov and enter the zip code of the place where you will be working. The current AQI is also available from the U.S. Forest Service at <https://tools.airfire.org> or a local air district, which can be located at www.arb.ca.gov/capcoa/dismap.htm. Employees who do not have access to the internet can contact their employer for the current AQI. The EPA website www.enviroflash.info can transmit daily and forecasted AQIs by text or email for particular cities or zip codes.

(4) The requirements in Cal/OSHA’s regulation about wildfire smoke.

If employees may be exposed to wildfire smoke, and the current AQI for PM2.5 at the worksite is 150 or more, Cal/OSHA requires employers to take several actions:

1. Find out what the current AQI is at the location.
2. Provide training to employees.
3. Lower employee exposures.
4. Provide respirators and encourage their use.

(5) The employer’s communication system.

Employers must establish a two-way communication system to alert employees when the air quality is harmful and what protective measures are available to employees. Employers must also have a system that encourages employees to inform their employers if they notice the air quality is getting worse, or if they are suffering from any symptoms due to the air quality, without

fear of reprisal. The University's will communicate with the campus community when the AQI for PM2.5 exceeds 150 in the following ways:

- Email communication to managers;
- An All Announcement to the entire campus community; and
- When feasible, sandwich boards will be placed around campus.

(6) The employer's methods to protect employees from wildfire smoke.

Each employer must take action to protect employees from PM2.5 in wildfire smoke. Examples of protective methods include relocating work in enclosed structures or vehicles where the air is filtered; changes in procedures such as moving workers to place with a lower AQI, reducing worktime in areas with unfiltered air, increasing rest time and frequency, providing a rest area with filtered air, and reducing the physical intensity of the work to help lower the breathing rate and heart rate. The University's control system is to provide covered employees with N95 masks while they are working outside or in unfiltered, unenclosed buildings or vehicles.

(7) The importance, limitations, and benefits of using a respirator when exposed to wildfire smoke.

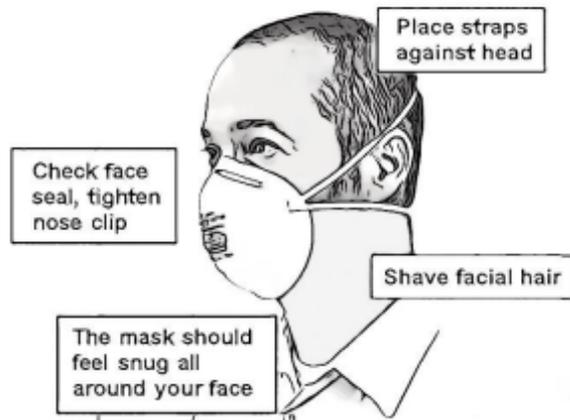
When the current AQI for PM2.5 is over 150, employers must provide their workers with proper respirators for voluntary use. If the AQI is over 500, respirator use is mandatory. Respirators can be an effective way to protect employee health by reducing exposure to wildfire smoke when they are properly selected and work. Respirator use can be beneficial even when the AQI for PM2.5 is less than 150, to provide additional comfort and protection. A respirator should be used properly and kept clean. The following precautions must be taken:

1. Choose respirators certified for the use to protect against the contaminant of concern. NIOSH, the National Institute of Occupational Safety and Health of the U.S. Centers for Disease Control and Prevention, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will list what the respirator is designed for (particulates, for example). Surgical masks or items worn over the nose and mouth such as scarves, T-shirts, and bandannas will not provide protection against smoke. A N95 filtering facepiece respirator, shown in the image below, is the minimum level of protection for wildfire smoke.
2. Read and follow all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.
3. Do not wear a respirator into atmospheres containing contaminants for which the respirator is not designed. A respirator designed to filter particles will not protect employees against gases or vapor, and it will not supply oxygen.
4. Employees should keep track of their respirator so that they do not mistakenly use someone else's respirator.
5. Employees who have a heart or lung problem should ask their doctor before using a respirator.

(8) How to properly put on, use, and maintain the respirators provided by the employer.

To get the most protection from a respirator, there must be a tight seal around the face. A respirator will provide much less protection if facial hair interferes with the seal. The proper way to put on a respirator can depend on the type and model of the respirator. For those who use an N95 or other filtering facepiece respirator, a mask that is made of filter material:

1. Place the mask over the nose and under the chin, with one strap placed below the ears and one strap above.
2. Pinch the metal part (if there is one) of the respirator over the top of the nose so it fits securely.



*Drawing Showing Proper Fitting of a Filtering Facepiece Respirator
(shaving is not required for voluntary respirator use)*

Regardless of the type of respirator, check how well it seals to the face by following the manufacturer's instructions for user seal checks. Adjust the respirator if air leaks between the seal and the face. The more air leaks under the seal, the less protection the user receives. Replace the respirator filter if it gets damaged, soiled, or difficult to breathe through. If you have symptoms such as difficulty breathing, dizziness, or nausea, go to an area with cleaner air, take off the respirator, and get medical help.