SAN DIEGO
Community College District

San Diego Community College District

Respiratory Protection Program

PROGRAM AUTHORIZATION

_____ Chancellor	
_____ Trustee _____ Trustee _____ Trustee	_____ Trustee _____ Trustee
_____ Vice Chancellor, Facilities	_____ Vice Chancellor, Human Resources
_____ Risk Manager	
Date:_____	

REVISION RECORD

Revision Date	Revision #	Initials	Contents of Revision
12/21/15	--	--	New
03/31/16	1	--	Unknown
	1709	TAW	Comprehensive update
06/20/2018		DV	Updated
01/27/2025	2501	MFC	Comprehensive Update

Table of Contents

I. PURPOSE

The San Diego Community College District, recognizing that the health, safety, and well-being of its employees are of paramount importance in the management of the District, affirms its commitment to create and maintain a safe and healthful working environment.

The District's *Respiratory Protection Program* is designed to ensure employees who are required to wear respiratory protection as a condition of their employment are protected from respiratory hazards by establishing acceptable practices for respirator use, providing guidelines for training, respiratory selection, proper storage, use, and care of respirators.

This program also outlines the responsibility of each College for evaluating potential atmospheric hazards and determining what level of protection, if any, is necessary.

When engineering or work practice controls are not feasible, practical, or deemed inadequate, the use of Personal Protective Equipment (PPE) in the form of respiratory protective equipment may be necessary to ensure the health of the employee.

II. REGULATORY CITATIONS

American National Standard Institute (ANSI) Z88.2-2015
California Code of Regulations, Title 3, § 6739
California Code of Regulations, Title 8, § 3204
California Code of Regulations, Title 8, § 5141
California Code of Regulations, Title 8, § 5144
California Code of Regulations, Title 8, § 5155
California Code of Regulations, Title 8, § 5155, Table AC-1
Code of Federal Regulations, Title 29, § 1910.134
Code of Federal Regulations, Title 49, § 180
National Fire Protection Association, 1989, "Standard on Breathing Air Quality for Emergency Services Respiratory Protection"

III. DISTRICT POLICIES AND PROCEDURES

SDCCD Board Policy 6800
SDCCD Air Monitoring Program (POL-RM-003)
SDCCD Personal Protective Equipment (POL-RM-017)
SDCCD Hazard Assessment (POL-RM-011)

IV. AUTHORITY

The Chancellor has ultimate authority and responsibility for the health and safety programs within the District. Creating broad-based safety accountability is the responsibility of the Chancellor and District leadership.

The Chancellor has designated the Vice Presidents of Administrative Services and the Regional Facilities Officers to act as the *Respiratory Protection Program* administrators at each College within the District. At the District office the designees are Risk Management while at the District Facilities Services Center it is the Director of Facilities

To ensure effective implementation of this *Program*, all personnel with designated specific responsibilities are expected to understand and implement the procedures outlined in this document, together with the specific contents of this *Respiratory Protection Program* for their assigned facility.

A. Chancellor's Designees

The Vice Presidents of Administrative Services and Regional Facilities Officers have the authority and is responsible for the implementation and maintenance of this program, including:

1. Identifying those employees who may require respiratory protection as a result of their work, processes, or tasks
2. Ensuring proper measurements have been conducted to verify or refute the need for respiratory protection at their College or Facility
3. Selecting and providing the proper type(s) of respiratory protection based on potential employee exposure, involving employees in the process whenever feasible
4. Providing for medical evaluations and fit-testing for respirator users
5. Providing for training to those employees required to use respirators
6. Recommending to the College Safety Committee any additions or changes to the *Respiratory Protection Program*
7. Developing or adopting the necessary policies and programs to adequately maintain a safe and healthful work and learning environment at the facilities of their responsibility
8. Assigning designees to fulfill all aspects of this *Program*.

B. Risk Management Office

The District Risk Management Office is responsible for the oversight and maintenance of this program, including:

1. Reviewing the *Program* annually and updating, as necessary
2. Evaluating the adequacy and consistency of respirator-related training in the District
3. Providing technical expertise to all Chancellor's Designees, as requested and required
4. Monitoring Cal/OSHA standards for relevant regulatory changes
5. Conducting periodic program audits and inspections at District facilities to evaluate compliance with all Federal, State, County, District, and College respiratory protection and air monitoring regulations

6. Reviewing site-specific programs drafted by the independent Colleges to ensure compliance and consistency with regulations, this program, and District policy.

C. Facilities Services

The Facilities Services Department is responsible for the implementation of this program, including:

1. Planning, organizing, and coordinating chemical safety training
2. Maintaining appropriate permits, including filing required annual elements with the appropriate State and County departments
3. Maintaining the records of inspections, hazard abatements, and training.
4. Identifying the need for respiratory protection in any new work or process performed by its personnel
5. Performing any sampling, and associated reports, of the work area per the District's *Air Monitoring Program*

D. Supervisors

Supervisors are responsible for implementing and enforcing the provisions of this program, including:

1. Monitoring respirator use to ensure that respirators are used in accordance with this *Program*
2. Ensuring employees receive proper training prior to using respiratory equipment and annually as required
3. Retaining associated training records for their employees
4. Maintaining a list of medically-approved employees
5. Knowing the hazards in the area in which they work that require respiratory protection
6. Verifying that the hazards that may require respiratory protection cannot be removed or reduced by other control methods
7. Knowing types of NIOSH-approved respirators that are available for use
8. Understanding the conditions under which respirator use is prohibited
9. Complying with accommodations as they relate to the voluntary use of respirators
10. Coordinating annual training and fit testing
11. Notifying the Dean or Manager of any changes in work processes that would impact airborne contaminant levels and associated respirator use
12. Reporting to the Risk Management Office any chemical exposures, regardless of the use of respiratory protection
13. Ensure proper storage and maintenance of respiratory protection equipment

E. Employees

Employees are responsible for

1. Completing all necessary training
2. Completing the Employee Medical Questionnaire prior to donning a respirator
3. Complying with all aspects of the *Respiratory Protection Program*
4. Wearing respirators when required by policy, procedure, or circumstances
5. Reporting all exposures and near misses to the appropriate supervisor
6. Properly maintaining and storing respiratory protection equipment
7. Reporting any equipment deficiencies or damages to the supervisor immediately
8. Reporting any program deficiencies to their supervisor or the Risk Management Office.
9. Not altering or modifying their respirators as doing so may compromise their effectiveness.
10. Applying necessary visual aid(s) to identify one's own mask to avoid confusion

F. Students

Due to the requirements of medical surveillance prior to the issuance of respirators, including for voluntary use, students will not be covered by this *Program* unless they are employed by the District.

V. RESPIRATOR SELECTION

The selection of respirators is based on the known and suspected airborne contaminants in the workplace. Contaminants may be physical, such as dust and mold, or chemical, such as organic vapors.

A. Air Monitoring

1. The proper and safe selection of respiratory protection requires the use of properly maintained and calibrated air monitoring equipment.
    a. The need for respiratory protective equipment cannot be refuted or substantiated without appropriate air monitoring.
    b. Air monitoring equipment shall be calibrated annually.
        1) Calibration records shall be kept for five (5) years.
        2) Some air sampling equipment that uses bellows or piston pumps may not require calibration.
2. Air monitoring equipment must be able to accurately measure at least
    a. Oxygen level
    b. Percent of lower explosive limit (LEL).
3. Employees may not use air monitoring equipment unless properly trained.
4. Specific sensors or other devices can be selected for targeted measuring of expected or anticipated contaminants, such as ammonia, hydrogen sulfide, and benzene.
5. In most instances, the level of particulate matter does not need to be measured.
6. The measured air contaminant and oxygen levels must be recorded to justify the decision regarding the need for respiratory equipment.
    a. Values can be recorded during a Risk Assessment. Refer to the District's

Personal Protective Equipment Program and *Hazard Assessment Program* for additional information.

1) Air monitoring results must be kept with the hazard assessment.

b. Values can be logged on any other permanent, retrievable record.

7. If the measured level of any hazardous chemical exceeds an occupational exposure limit or action level after engineering controls and work practices have been implemented, if engineering controls are not possible, or if engineering controls are not effective at reducing the levels of airborne contaminants, then respiratory protection will be required.
   a. Occupational exposure limits for specific chemicals are located in
      1) Safety Data Sheets (SDS)
      2) *The NIOSH Pocket Guide to Chemical Hazards* (https://www.cdc.gov/niosh/npg/)
      3) Title 8 CCR, Section 5155, Table AC-1.
   b. Published exposure limits for time weighted averages include
      1) Permissible exposure limits (PEL)- Occupational Safety and Health Administration
         a) Legally enforceable limits
      2) Recommended exposure limits (REL)- National Institute of Occupational Safety and Health
      3) Threshold limit values (TLV)- American Conference of Governmental Industrial Hygienists
   c. The lowest of the above listed published values shall be used to determine the need for respiratory protection.
   d. Other occupational exposure limits include
      1) Short-term exposure limits (STEL) - 15-minute maximum exposure requiring at least one hour between exposures
      2) Ceiling (C) - maximum concentration that an employee can be exposed to at any time
      3) Immediately Dangerous to Life and Health (IDLH) - exposure to levels at or above will likely result in irreversible health effects, including death, or may interfere with an employee's ability to exit in an emergency.
8. Air monitoring must be performed regularly while employees are in an area that can contain hazardous airborne chemicals.
9. Air monitoring is not required when

   a. The only airborne contaminants are biohazardous
   b. Activities occur in exterior, above grade locations
   c. An employee will not enter the enclosed space to perform work
   d. The location of the work is too small for an employee to enter or so configured that they cannot place their head or body within the space.

B. General Requirements

1. Engineering controls and work practices shall be implemented to reduce the

airborne concentration of hazardous chemicals before relying on respiratory protection to protect employees.

a. Respiratory protection can be used while engineering controls are being implemented.
b. The measured concentration of the air contaminant divided by the assigned protection factor for the respirator used must be below the occupational exposure limit.
    1) Assigned protection factors (8 CCR 5144)
        a) Half-face air-purifying respirator: 10
        b) Full-face air-purifying respirator: 50
        c) Filtering facepieces: 10
c. The maximum concentration for which an air-purifying respirator can be safely used is termed the Maximum Use Concentration (MUC).
    1) The MUC is determined by multiplying the assigned protection factor by the PEL or other occupational exposure limit, other than short-term or ceiling levels.
    2) If the measured concentration is higher than the MUC, employees may not enter the area.
d. Air-purifying respirators may not be used in IDLH atmospheres, including oxygen deficient (<19.5%).

2. Employees may not be assigned or wear respirators until they have been medically cleared and fit tested.
3. Only NIOSH approved respirators will be used.
4. When respiratory protection is required, all appropriate equipment will be provided to the employees at no cost.
    a. The supervisor will offer at least two (2) different makes and models of respirators of appropriate sizes to the employees.
    b. The best-fitting and most comfortable size and model shall be selected by the employee by way of fit-testing.
5. Before entering small buildings, such as hazardous waste storage areas, or below-grade areas, such as pits or vaults, the employees must verify by way of atmospheric testing that the oxygen level is greater than 19.5%.
    a. Neither the District or any of its Colleges may provide supplied air respirators for its employees, therefore entry into spaces containing less than 19.5% oxygen is prohibited.
        1) Exception: Miramar College Fire Science Program incorporates the use of self-contained breathing apparatus (SCBA) in their curriculum
    b. If the area is deemed to be less than 19.5% oxygen, mechanical ventilation shall be installed and operated
        1) Until the oxygen level is within safe limits, and
        2) While the employees are in the space
            a) Constant monitoring of the oxygen levels by an individual outside of the area and having an emergency communication device shall occur until all operations and cleanup in the space are completed and all employees have exited the

space.

6. The supervisor, in conjunction with the Risk Management Office, shall determine the appropriate type of respiratory protection which shall be
    a. No respiratory protection is required
    b. Filtering face pieces may be used
    c. Filtering face pieces are required
    d. Air-purifying respirators may be used
    e. Air-purifying respirators, full- or half-face, are required.
7. Employees may not enter areas where the concentration of flammable chemicals is measured greater than 10% of the lower explosive limit (LEL).

C. Respirator Applications

The respirators listed in this section shall be used for the designated tasks. Supervisors, in consultation with the Risk Management Office, can identify additional tasks and jobs that require respiratory protection.

1. High-Efficiency Particulate Air (HEPA) Filter/Filtering Facepieces

HEPA filters may be either air-purifying respirators (integrated units or replaceable cartridges) or filtering facepieces (“dust masks”).

a. High-efficiency particulate air (HEPA) filters and masks are designed to remove particles (solids), including bioaerosols, from the air the employee breathes.
b. HEPA air-purifying respirators or filtering facepieces shall be used for
    1) Dusty operations, such as sand blasting
    2) Aerosol generating operations, such as spray-painting latex paints
    3) Pesticide application, if allowed by the product’s directions
    4) Cleaning areas of mold
    5) Maintenance on exhaust ventilation systems for biological safety cabinets
    6) Welding
    7) Tuberculosis or other biohazard/aerosol transmissible disease protection
    8) Other applications identified by the supervisor.
c. Filtering facepieces (FFP) are not surgical masks, although they have a similar appearance and may be used as such.
    1) FFP can be used as surgical masks but surgical masks cannot be used as FFP.
    2) FFP must have NIOSH certification on the mask.
    3) FFP do NOT provide protection against gases and vapors.
d. HEPA filters are selected based on the amount of oil vapor in the environment
    1) N = not oil resistant
    2) R = oil resistant

3) P = oil-proof
4) Applications
    a) P shall be used for paint and pesticide applications.
    b) N may be used for dust generating activities, welding, and bioaerosol protection.

e. HEPA filters are selected based on the efficiency at removing particles
1) 95 = removes 95% of airborne particulates (300 nm)
2) 99 = removes 99%
3) 100 = removes 99.7%.
4) In each instance where no particulate testing has been conducted, the 95 series filters are considered the default device.

f. Particulate filter cartridges shall be disposed of when
1) Visibly contaminated
2) They have been splashed with liquid
3) Breathing resistance is encountered
4) They become torn or otherwise damaged.
5) Packaging is labeled as “single use only”
6) In accordance with a set schedule for any items which are reused

g. Filtering facepiece (FFP) shall be disposed of:
1) Visibly contaminated
2) They have been splashed with liquid
3) Breathing resistance is encountered
4) They become torn or otherwise damaged
5) The end of the work shift (3 CCR 6739(o)(3)).
6) Packaging is labeled as “single use only”
7) After 8 hours of use in a high dust environment
8) In accordance with a set schedule for replacement of any items which are reused

h. Reuse of canisters, cartridges and filters
1) Is allowable only when reused by the same wearer

2. <u>Air-purifying Respirators (APR)</u>

a. APR may be either full-face, if eye protection is required, or half-face.
1) When selecting half-face respirators, consideration must be given to the impact other PPE has on the proper seal as well as the impact the respirator has on the efficacy of the other PPE.

b. APR, with appropriately selected cartridges, shall be used for
1) Consolidating hazardous chemicals or hazardous waste outside of a fume hood
2) Oil-based aerosol generating operations, such as spray-painting oil-based paints
3) Maintenance activities on exhaust ventilation systems for hazardous chemicals, such as fume hoods or vehicle maintenance facilities
4) Pesticide application, if required by the product’s directions
5) Exposure to large amounts of formaldehyde-based cadaver

preservatives
6) Spill response for minor or moderate chemical spills
7) Other applications identified by the supervisor.

c. Air-purifying cartridges appropriate for the identified or suspected hazards shall be made available to the employees.
   1) Chemical cartridges may be single contaminant or combination cartridges
   2) Cartridges shall be selected based on the known or anticipated chemicals present in the workplace.
   3) Chemical cartridges may be fitted with permanent or removable HEPA pre-filters as necessary.
   4) Multi-chemical combination cartridges are available.
d. HEPA pre-filters, both integrated and add-on, are available to protect the cartridges from particulate matter.
e. Chemical cartridges whose packaging has been opened shall be disposed of after
   1) Eight (8) hours
   2) End of the day, regardless of usage
   3) When breakthrough by way of smell, taste, or irritation of chemicals is detected.
   4) The selection of the above mentioned change schedules is based on the lack of chemical processes generating large amounts of vapors or fumes and the short exposure times to chemical hazards (8 CCR 5144(d)(3)(C)(2)b).

VI. RESPIRATOR USE

Respirators must be worn in situations where District or College has identified the level of airborne contaminants or other circumstances require its use. Employees may voluntarily elect to wear respirators as long as it is not used to protect them from atmospheric contaminants. Air-purifying respirators cannot protect employees from atmospheres where there is inadequate oxygen or where the flammable level is above 10% of the LEL.

A. Facepiece Seal

1. The integrity of the face-to-facepiece seal must be maintained at all times.
2. Individuals may not use, or fit test, respirators if they have more than one (1) day's facial hair grown as facial hair prevents a proper seal, reducing the effectiveness of respirators
   a. This includes sideburns, hair, moustaches, beards, and goatees.
3. Other protective equipment, such as corrective glasses, safety glasses, goggles, or hearing protection shall be worn in a manner that does not interfere with the face-to-facepiece seal.

B. User Seal Checks

These tests are only applicable to air-purifying respirators.

1. Every time a user dons an air-purifying respirator, the following checks must be performed prior to beginning work, resuming work after a break, or entering a contaminated environment (8 CCR 5144, App. B-1).
    a. Positive pressure check
        1) Cover exhalation valve with hand or other object.
        2) Exhale gently into the facepiece.
        3) The test is considered successful if no leak is detected.
        4) If the test fails, the user should reposition the facepiece and repeat the test.
        5) If the test fails again, the user must report the problem to their supervisor as a different size or model may be required.
            a) Different sizes or models may not be worn until a fit-test is passed for that specific size and/or model.
    b. Negative pressure check
        1) Cover the inlet opening of the canister or cartridges with the palm(s) of the hand or a glove.
            a) It may be easier to perform the test by removing the canister or cartridges and covering the inlet(s).
        2) Inhale gently until the facepiece slightly collapses and hold for ten (10) seconds.
        3) The test is considered successful if no leak is detected.
        4) If the test fails, the user should reposition the facepiece and repeat the test.
        5) If the test fails again, the user must report the problem to their supervisor as a different size or model may be required.
            a) Different sizes or models may not be worn until a fit-test is passed for that specific size and/or model.

C. Respirator Effectiveness

1. A method of monitoring contaminant levels periodically must be established.
    a. If conditions change, the supervisor must determine whether the respirator is still providing adequate protection.
    b. If the respirator no longer provides adequate protection, employees must immediately leave the contaminated area and other additional controls, such as increased ventilation, must be deployed.
2. If breakthrough (smelling or tasting of chemicals) or breathing resistance is detected, the employee shall immediately leave the area.
    a. The employee shall install a new set of cartridges or replace the FFP.
    b. The employee shall repeat the user seal checks.
3. If the respirator malfunctions in any manner, the employee shall immediately leave the area.
4. If the cartridges become saturated with liquids due to a splash, the employee shall immediately leave the area.

   a. The cartridges shall be replaced before re-entering the work space.
   b. The respirator shall be wiped clean before re-entering the work space.
5. Upon leaving the area and before removing the facepieces, employees shall wash their hands.
   a. Wearer shall make a determination for acceptable reuse of cartridges or filters and dispose of any items in need of replacement
6. After removing the facepieces, the employees shall wash their faces with soap and water.
   a. Air-purifying facepieces shall be wiped with non-alcohol wipes and allowed to air dry prior to storing the respirator.

VII. VOLUNTARY USE

In some occupational environments, the atmospheric evaluation may indicate that a respirator is not required for employee safety. However, some employees may elect to voluntarily wear respirators due to perceived hazards. The following outline the requirements for such usage.

1. The employee is responsible for purchasing any air-purifying respiratory equipment that is not required by this *Program*.
   a. The employee will not be reimbursed for any costs of voluntarily worn equipment.
   b. Exception: for employees who apply pesticides, District or College may provide respirators at the employee's request (3 CCR 6739(b)(1)).
2. The respirator must be approved by the supervisor, in conjunction with the Risk Management Office, prior to use.
3. The respirator must be NIOSH approved and appropriate for the hazards the employee is protecting themselves from.
4. If the respirator introduces unnecessary hazards, as determined by the supervisor and the Risk Management Office, voluntary respirator use will be prohibited.
5. For employee's who elect to only wear filtering facepieces as a precaution and not to control a respiratory hazard, the criterion is as follows
   a. The employee must be provided with a copy of Appendix A, *Information for Employees Using Respirators When Not Required Under The Standard*.
6. For employees who elect to wear air-purifying cartridge respirators as a precaution and not to control a respiratory hazard, the criteria are as follows
   a. The employee must be medically approved to wear the respirator prior to using the respirator at work.
   b. The employee must be provided with a copy of Appendix A, *Information for Employees Using Respirators When Not Required Under The Standard*.

VIII. MEDICAL EVALUATIONS

Unless otherwise stated below, employees shall not be allowed to use respiratory protection without prior medical evaluation.

A. Filtering Facepieces

1. Voluntary use of filtering facepieces does not require a medical evaluation.
2. Required use of filtering facepieces, such as for the protection of Student Health Clinic Staff and College Police from aerosol transmissible diseases (e.g., TB), requires a medical evaluation.
    a. If a Student Health Clinic or College Police employee has been medically approved to wear a filtering facepiece or other respirator prior to October 18, 2004, this can be used as their initial medical examination.
        1) The examination must have consisted of a questionnaire, examination, or both.
        2) The employee must be able to provide or obtain a written statement from the medical provider regarding their medical clearance.

B. General

Employees who are assigned air-purifying respirators, filtering facepieces, or voluntarily elect to wear air-purifying respirators must undergo a medical evaluation.

1. Employees must complete a medical questionnaire, such as in Appendix B or similar form provided by the contracted medical provider, prior to their evaluation.
    a. Time shall be given to the employee during their normal work day to complete the questionnaire.
    b. Confidentiality of the medical questionnaire shall be maintained by providing the blank questionnaire to the employee and having the employee take the completed questionnaire to the medical provider or by providing the employee with a postage-paid, pre-addressed envelope to mail the completed questionnaire.
2. Medical evaluations shall be performed by the District's contracted medical provider.
    a. Time shall be given to the employee during their normal work day to complete the medical evaluation.
3. The medical evaluation must take place prior to the employee's fit test.
4. The supervisor must ensure that the medical provider has
    a. Make, model, and type of respirator, including weight
    b. Duration and frequency of anticipated use
    c. Expected physical effort while using respirator
    d. Any additional PPE that will be worn
    e. Temperature and humidity extremes
    f. Copy of this *Program*
    g. Copy of Title 8 CCR 5144, Section (e)
        1) Supervisors can verify if the medical provider requires a copy of the regulatory standard.
5. The medical provider must provide a written recommendation regarding the ability of the employee to wear a respirator.

   a. The opinion must include any limitations or required follow-up evaluations.
   b. The opinion must state that the medical provider has given the employee a copy of the recommendation.
   c. Refer to Appendix C for an example of a medical recommendation form (3 CCR 6739(s)).
6. Additional medical evaluations shall occur:
   a. When an employee shows signs or symptoms of chemical exposure
   b. When an employee shows changes in their ability to use a respirator, such as increased heart rate or increased breathing rate during or after respirator use
   c. When the medical provider recommends a re-evaluation
   d. When substantial changes occur in the tasks or work to be performed while wearing a respirator occur
   e. Three (3) years after the most recent evaluation.

IX. FIT TESTING PROCEDURES

Fit-testing can only be performed after the employee has been medical cleared and trained.

A. General

1. The purpose of the fit test is to identify the specific make, model, style, and size that are best suited for the employee.
   a. The supervisor must maintain respirators from at least two (2) manufacturers and in different sizes for their employees.
2. Fit testing is required
   a. Before initial use of the respirator
   b. Whenever the employee selects a different model or size
   c. Whenever the employee experiences changes in physical condition that may affect the fit of the respirator, including but not limited to
      1) Facial scarring
      2) Dental changes
      3) Cosmetic surgery
      4) Obvious changes in body weight
   d. Annually.
3. District or College shall only conduct qualitative fit test methods.
   a. Quantitative or qualitative fit testing may be conducted by the District's contracted medical service provider.
4. Fit testing shall only be performed by qualified individuals.
5. Fit testing methods shall be selected from one of the standard methods (8 CCR 5144, App A). If the subject fails the sensitivity/detection test, a different test method must be selected.
   a. Isoamyl acetate- using organic vapor cartridges (not for filtering facepieces)
   b. Saccharin solution aerosol- using particulate filters, including filtering facepieces

   c. Bitrex- using particulate filters, including filtering facepieces
   d. Irritant Smoke/stannic chloride- using particulate filters, including filtering facepieces
6. The qualitative fit test consists of seven actions, each performed for one minute, while the respirator fit is being challenged by a chemical agent.
   a. Normal breathing
   b. Deep breathing
   c. Turning head side-to-side
   d. Moving head up-and-down
   e. Talking
   f. Bending over
   g. Normal breathing.
7. The results of the fit test shall be recorded on a form, refer to Appendix D for an example. The form shall record
   a. Date
   b. Name of subject
   c. Fit test method/chemical
   d. Results of sensitivity/detection test
   e. Manufacturer, model, and size of respirator
   f. Results of fit test
   g. Name and signature of person conducting fit test.

X. RESPIRATOR MAINTENANCE AND CARE

Improperly maintained, stored, or cleaned respirators provide reduced levels of protection or can introduce additional hazards to the wearer.

A. Routine Cleaning

1. District or College will provide non-alcohol wipes for use with air-purifying respirators.
2. APR's should be wiped down after every use and allowed to air dry prior to packaging for storage.
3. Filtering facepieces have no routine maintenance as they are disposable.

B. Annual Cleaning and Disinfecting (8 CCR 5144, App B-2)

This section only applies to cartridge respirators and not filtering facepieces. Respirators shall be disassembled and thoroughly disinfected at least annually. The manufacturer's instructions for cleaning and disinfecting can be used in place of these instructions. This procedure should only be performed by an individual knowledgeable with the components of the respirator.

1. Remove and dispose of cartridges, filters, or canisters.
2. Disassemble facepiece by removing diaphragms, valves, or other removable parts.

3. Inspect all removed parts and replace if necessary.
4. Wash parts, including facepiece, in warm water with mild detergent or cleanser.
5. Rinse thoroughly to prevent detergent from interfering with respirator function.
6. If detergent or cleanser does not contain a disinfecting agent, all parts shall be immersed for two minutes in one of the following warm solutions:
    a. 0.1% bleach/water solution
    b. 0.08% tincture of iodine/water solution
    c. Other commercially available disinfectant cleanser as recommended by the respirator manufacturer.
7. Rinse in warm, not hot, water.
8. The facepiece and all components shall be dried with a lint-free cloth or air-dried.
9. The facepiece shall be reassembled and tested to ensure all components function properly.

C. Storage

1. All respirators shall be stored to protect them from damage due to sunlight, dust, chemicals, extreme temperatures, and excessive moisture.
2. Air-purifying respirators, not including filtering facepieces, should be stored in resealable bags.
3. Respirators shall not be stored in such a manner that they become deformed.

D. Inspection

1. Respirators shall be inspected
    a. Before use
    b. During cleaning
2. Components inspected shall include
    a. Respirator function
    b. Condition of facepiece, including straps and valves

E. Repairs

1. Air-purifying respirators that fail visual inspection shall immediately be removed from service.
    a. A replacement respirator of the same model and size shall be provided to the employee.
2. Only employees properly trained to repair the exact model of respirator shall make repairs or adjustments.
3. Only the manufacturer's NIOSH-approved parts shall be used for repairs.

XI. TRAINING

Respiratory Protection training is available on the Keenan SafeColleges portal.

A. Frequency

Employee training on respiratory protection is required

1. Before an employee is assigned a respirator
2. Annually
3. When performance demonstrates the need for additional training.

B. Training- Voluntary Use

For those employees who voluntarily use filtering facepieces or air-purifying respirators, training shall consist of

1. Reviewing with the employee the *Information for Employees Using Respirators When Not Required Under The Standard* in Appendix A.

C. Training- Required Use

Employees who may require the use of respiratory protection must be trained in the following topics

1. Why respiratory protection is necessary
2. Importance of proper fi, usage, and maintenance
3. Limitations and capabilities of respirator
4. Actions to take if respirator malfunctions
5. Pre-use inspections, proper donning, proper doffing, and user seal checks
6. Proper maintenance and storage
7. Recognizing medical signs and symptoms related to respirator use and chemical exposure
8. A review of this *Program*
9. General requirements of the respiratory protection standard (8 CCR 5144).

XII. RECORDS

A. Respirator Records

1. The supervisor will maintain a list of the following
    a. Personnel medically cleared to use respirators
    b. List of currently approved respirators and cartridges
    c. Fit test records
    d. Training records.

B. Medical Records

1. Medical records, including the medical provider's written opinion, shall be kept for the period of employment plus thirty (30) years.
2. If an employee is experiencing an exposure, medical records regarding the

diagnosis and treatment shall be kept for the period of employment plus thirty (30) years.

C. Training Records

1. Training records shall be kept for at least three (3) years.

D. Air Monitoring Records

1. In the event of an employee exposure, the record of the air monitoring levels must be retained for thirty (30) years.

E. Fit-Test Records

1. Fit-test records must be kept for the duration of the assignment that requires respiratory protection plus three (3) years (3 CCR 6739(p)(1)).

F. Program

1. Whenever this *Program* is updated, the previous version must be retained by the Risk Management Office for at least three (3) years (3 CCR 6739(p)(3)).

Appendix A:
Information for Employees Using Respirators When Not Required Under the Standard
(8 CCR 5144, App D)

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 for your voluntary use, or if 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 respirators 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.

Appendix B:
Employee Medical Questionnaire
(8 CCR 5144, App C)

To the employer: Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee:

Can you read (circle): Yes/No

Your employer must allow you to answer the questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date: _____
2. Your name: _____
3. Your age (to nearest year): _____
4. Sex (circle one): Male/Female
5. Your height: _____ ft. _____ in.
6. Your weight: _____ lbs.
7. Your job title: _____
8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code):_____
9. The best time to phone you at this number: _____
10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No
11. Check the type of respirator you will use (you can check more than one category):
    a. ___ N, R, or P disposable respirator (filter-mask, non-cartridge type only).
    b. ___ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).
12. Have you worn a respirator (circle one): Yes/No

If “yes,” what type(s): _____

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle “yes” or “no”).

1. Do you currently smoke tobacco, or have you smoked tobacco in the last month: Yes/No
2. Have you ever had any of the following conditions?
    a. Seizures: Yes/No
    b. Diabetes (sugar disease): Yes/No
    c. Allergic reactions that interfere with your breathing: Yes/No
    d. Claustrophobia (fear of closed-in places): Yes/No
    e. Trouble smelling odors: Yes/No
3. Have you ever had any of the following pulmonary or lung problems?
    a. Asbestosis: Yes/No
    b. Asthma: Yes/No
    c. Chronic bronchitis: Yes/No
    d. Emphysema: Yes/No
    e. Pneumonia: Yes/No
    f. Tuberculosis: Yes/No
    g. Silicosis: Yes/No
    h. Pneumothorax (collapsed lung): Yes/No
    i. Lung cancer: Yes/No
    j. Broken ribs: Yes/No
    k. Any chest injuries or surgeries: Yes/No
    l. Any other lung problem that you've been told about: Yes/No
4. Do you currently have any of the following symptoms of pulmonary or lung illness?
    a. Shortness of breath: Yes/No
    b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
    c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
    d. Have to stop for breath when walking at your own pace on level ground: Yes/No
    e. Shortness of breath when washing or dressing yourself: Yes/No
    f. Shortness of breath that interferes with your job: Yes/No
    g. Coughing that produces phlegm (thick sputum): Yes/No
    h. Coughing that wakes you early in the morning: Yes/No
    i. Coughing that occurs mostly when you are lying down: Yes/No
    j. Coughing up blood in the last month: Yes/No
    k. Wheezing: Yes/No
    l. Wheezing that interferes with your job: Yes/No
    m. Chest pain when you breathe deeply: Yes/No
    n. Any other symptoms that you think may be related to lung problems: Yes/No
5. Have you ever had any of the following cardiovascular or heart problems?

a. Heart attack: Yes/No

b. Stroke: Yes/No

c. Angina: Yes/No

d. Heart failure: Yes/No

e. Swelling in your legs or feet (not caused by walking): Yes/No

f. Heart arrhythmia (heart beating irregularly): Yes/No

g. High blood pressure: Yes/No

h. Any other heart problem that you've been told about: Yes/No

6. Have you ever had any of the following cardiovascular or heart symptoms?

a. Frequent pain or tightness in your chest: Yes/No

b. Pain or tightness in your chest during physical activity: Yes/No

c. Pain or tightness in your chest that interferes with your job: Yes/No

d. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No

e. Heartburn or indigestion that is not related to eating: Yes/No

f. Any other symptoms that you think may be related to heart or circulation problems: Yes/No

7. Do you currently take medication for any of the following problems?

a. Breathing or lung problems: Yes/No

b. Heart trouble: Yes/No

c. Blood pressure: Yes/No

d. Seizures (fits): Yes/No

8. If you've ever used a respirator, have you ever had any of the following problems?

(If you've never used a respirator, check the following space and go to question 9:___)

a. Eye irritation: Yes/No

b. Skin allergies or rashes: Yes/No

c. Anxiety: Yes/No

d. General weakness or fatigue: Yes/No

e. Breathing difficulties: Yes/No

f. Any other problem that interferes with your use of a respirator: Yes/No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. Have you ever lost vision in either eye (temporarily or permanently): Yes/No

11. Do you currently have any of the following vision problems?

a. Wear contact lenses: Yes/No

b. Wear glasses: Yes/No

c. Color blind: Yes/No

d. Any other eye or vision problem: Yes/No

12. Have you ever had an injury to your ears, including a broken ear drum: Yes/No

13. Do you currently have any of the following hearing problems?

a. Difficulty hearing: Yes/No

b. Wear a hearing aid: Yes/No

c. Any other hearing or ear problem: Yes/No

14. Have you ever had a back injury: Yes/No

15. Do you currently have any of the following musculoskeletal problems?

a. Weakness in any of your arms, hands, legs, or feet: Yes/No

b. Back pain: Yes/No

c. Difficulty fully moving your arms and legs: Yes/No

d. Pain and stiffness when you lean forward or backward at the waist: Yes/No

e. Difficulty fully moving your head up or down: Yes/No

f. Difficulty fully moving your head side to side: Yes/No

g. Difficulty bending at your knees: Yes/No

h. Difficulty squatting to the ground: Yes/No

i. Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes/No

j. Any other muscle or skeletal problem that interferes with using a respirator: Yes/No

Part B. Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen: Yes/No

If “yes,” do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes/No

2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes/No

If “yes,” name the chemicals if you know them:_____, _____, _____, _____.

3. Have you ever worked with any of the materials, or under any of the conditions, listed below:

a. Asbestos: Yes/No

b. Silica (e.g., in sandblasting): Yes/No

c. Tungsten/cobalt (e.g., grinding or welding this material): Yes/No

d. Beryllium: Yes/No

e. Aluminum: Yes/No

f. Coal (for example, mining): Yes/No

g. Iron: Yes/No

h. Tin: Yes/No

i. Dusty environments: Yes/No

j. Any other hazardous exposures: Yes/No

If "yes," describe these exposures:

_____
_____

4. List any second jobs or side businesses you have:

_____

5. List your previous occupations:

_____

6. List your current and previous hobbies:

_____

7. Have you been in the military services? Yes/No

If "yes," were you exposed to biological or chemical agents (either in training or combat): Yes/No

8. Have you ever worked on a HAZMAT team? Yes/No

9. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes/No

If "yes," name the medications if you know them: _____

10. Will you be using any of the following items with your respirator(s)?

a. HEPA Filters: Yes/No

b. Canisters (for example, gas masks): Yes/No

c. Cartridges: Yes/No

11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?:

a. Escape only (no rescue): Yes/No

b. Emergency rescue only: Yes/No

c. Less than 5 hours per week: Yes/No

d. Less than 2 hours per day: Yes/No

e. 2 to 4 hours per day: Yes/No

f. Over 4 hours per day: Yes/No

12. During the period you are using the respirator(s), is your work effort:

a. Light (less than 200 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: ___ hrs. ____ mins.

Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines.

b. Moderate (200 to 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: ____ hrs. ____ mins.

Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic; standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

c. Heavy (above 350 kcal per hour): Yes/No

If “yes,” how long does this period last during the average shift: ____ hrs. ____ mins.

Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using the respirator: Yes/No

If “yes,” describe this protective clothing and/or equipment:
_____.

14. Will you be working under hot conditions (temperature exceeding 77 deg. F): Yes/No

15. Will you be working under humid conditions: Yes/No

16. Describe the work you'll be doing while you're using your respirator(s):
_____
_____

17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):
_____

_____

18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

Name of first toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

Name of second toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

Name of third toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

The name of any other toxic substances that you'll be exposed to while using your respirator:
_____

_____

_____

_____

19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security):
_____

_____

Appendix C:
Medical Recommendation Form

The following or substantially similar statement from a physician is acceptable (3 CCR 6739(s)):

On _____, I evaluated _____.
Date Patient's name

At this time there (are)/(are not) medical contraindications to the employee named above wearing a respirator while working in potentially harmful exposure environments. The patient (does)/(does not) require further medical evaluation at this time. Any restrictions to wearing a respirator or to the type of respiratory protection are given below:

_____

_____

_____

_____

I have provided the above-named patient with a copy of this form.

_____ _____

Physician Date

Appendix D:
Fit Test Record

Date:	Employee:	Campus/Facility: City / Mesa / Miramar / Other:
Job Class:	Supervisor:	
Test Method		
Isoamyl acetate / Saccharin / Bitrex / Stannic chloride		Sensitivity/Detection: Y / N
Respirator		
Type: Filtering facepiece / APR	Manufacturer:	Model:
	Cartridge type: HEPA / OV NA	Size: S / SM / M / ML / L
Test Result		
Pass	Fail	
Name of fit tester:	Signature	

Note: this fit test expires one year from the date noted on the top of the form.

Provide one (1) copy to test subject, one (1) copy for supervisor and retain original.

TRAINING RECORD

Subject: _____Facility:_____

Date	Time	Instructor

Name (print)	Signature	Department	Supervisor