# RESPIRATORY PROTECTION PROGRAM

# **CRAFTON HILLS COLLEGE**

# TABLE OF CONTENTS

TABL	E OF CONTENTS	2
I.	INTRODUCTION	
II.	PROGRAM ADMINISTRATION	1
III.	ROLES AND RESPONSIBILITIES	1
IV.	DEFINITIONS	2
V.	RESPIRATORY WORKPLACE HAZARDS	4
VI.	PROGRAM EVALUATION	6
VII.	MEDICAL EVALUATIONS	6
VIII.	FIT TESTING	8
IX.	USE OF RESPIRATORS	9
X.	VOLUNTARY RESPIRATOR USE	11
XI.	RESPIRATOR SELECTION	
XII.	BREATHING AIR QUALITY – SUPPLIED AIR ONLY	
XIII.	RESPIRATOR MAINTENANCE	13
XIV.	RESPIRATOR STORAGE	14
XV.	TRAINING	
XVI.	DOCUMENTATION AND RECORDKEEPING	15
APPE	NDIX A	
	ESTING PROCEDURES	
	NDIX B	
USER	SEAL CHECK PROCEDURES	21
<b>APPE</b>	NDIX C	
	IRATOR CLEANING PROCEDURES	
	NDIX D	
MEDI	ICAL EVALUATION QUESTIONNAIRE	26
<b>APPE</b>	NDIX E	
RESP	TRATOR SELECTION	28
	NDIX F	
INFO	RMATION FOR VOLUNTARY RESPIRATOR USE	30
	NDIX G	
CHC 1	RESPIRATORY PROTECTION TRAINING CHECKLIST	32

## I. INTRODUCTION

- 1. The Crafton Hills College 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 so as to provide protection from respiratory hazards. The purpose of this program is to ensure that all employees required to wear respiratory protection as a condition of their employment are protected from respiratory hazards through the proper use of respirators.
- 2. When effective administrative, engineering or work practice controls are not feasible, practical, or in emergency situations, the use of personal respiratory protective equipment may be necessary to protect the health of the employee. An effective respiratory protection program is essential to assure that the personnel using such equipment are adequately protected.
- 3. All respirator use will occur within the context of a comprehensive program as per the standards set forth by:

California Code of Regulations (CCR), Title 8, Section 5144; American National Standard Institute (ANSI) Z88.2-1980

4. The standards require a written program, medical evaluation, training, and fit testing.

#### II. PROGRAM ADMINISTRATION

1. The Vice President of Administrative Services is responsible for the administration of the respiratory protection program and is thus called the Respiratory Protection Program Administrator.

# III.ROLES AND RESPONSIBILITIES

- 1. Program Administrator
  - a. The Program Administrator will be responsible for the management of this program and for ensuring that all aspects of this program are followed. The Program Administrator is responsible for:
    - 1. Identifying those employees who may need respiratory protection as a result of their work, processes, or tasks
    - 2. Selecting and providing the proper type (s) of respiratory protection based on employee exposure, involving employees whenever possible
    - 3. Providing medical evaluations and fit-testing for respirator users
    - 4. Providing training to those employees required to use respirators
    - 5. Monitor Cal/OSHA standards for changes and revise the program as needed
    - 6. Monitor Center for Disease Control (CDC) and the California Department of Public Health (CDPH) recommendations and

- guidelines as they relate to respiratory protection and other recommended infection control measures
- 7. Review the plan annually and revise as needed to ensure it remains a viable working document that reflects the current needs of the college

## 2. Supervisors

- a. Supervisors are responsible for ensuring that the respiratory protection program is implemented in their areas appropriately. In addition to being knowledgeable about the program requirements for their own protection, Deans must also ensure that the program is understood and followed by the employees under their charge. Supervisors are responsible for:
  - 1. Monitoring respirator use to ensure that respirators are used in accordance with this program, training received, and manufacturer's instructions are followed
  - 2. Knowing the hazards in the area in which they work
  - 3. Knowing types of respirators that need to be used
  - 4. Ensuring the respirator program and worksite procedures are followed
  - 5. Enforcing/encouraging employees to use respirators as required
  - 6. Ensuring employees receive training and medical evaluations
  - 7. Coordinating annual retraining and/or fit testing
  - 8. Notifying the Respiratory Protection Program Administrator or Dean of any problems with respirator use, or changes in work processes that would impact airborne contaminant levels
  - 9. Ensure proper storage and maintenance of respiratory protection equipment

# 3. Employees

- a. Employees are responsible for:
  - 1. Participating in all required training
  - 2. Wear respirator when required
  - 3. Ensure proper storage and maintenance of respiratory protection equipment
  - 4. Report respiratory equipment malfunctions or concerns

## IV. DEFINITIONS

**Air-purifying respirator** means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.

**Air-supplying** respirator means a respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

**Emergency situation** means any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant.

**Employee exposure** means exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

**End-of-service-life indicator (ESLI)** means a system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.

**Filter cartridge or air purifying element** means a component used in respirators to remove solid or liquid aerosols from the inspired air.

**Filtering facepiece (dust mask)** means a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium.

**Fit factor** means a quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

**Fit test** means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also Qualitative fit test QLFT and Quantitative fit test QNFT.)

**High efficiency particulate air (HEPA) filter** means a filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.

**Immediately dangerous to life or health (IDLH)** means an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

**Negative pressure respirator (tight fitting)** means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

**Oxygen deficient atmosphere** means an atmosphere with an oxygen content below 19.5% by volume.

**Physician or other licensed health care professional (PLHCP)** means an individual whose legally permitted scope or practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by this program.

**Positive pressure respirator** means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

**Powered air-purifying respirator (PAPR)** means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

**Pressure demand respirator** means a positive pressure air-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.

**Qualitative fit test (QLFT)** means a pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

**Quantitative fit test (QNFT)** means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

**Respiratory inlet covering** means that portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. It may be a facepiece, helmet, hood, suit, or a mouthpiece respirator with nose clamp.

**Self-contained breathing apparatus (SCBA)** means an air-supplying respirator for which the breathing air source is designed to be carried by the user.

**Service life** means the period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer.

**Supplied-air respirator** (SAR) or airline respirator means an air-supplying respirator for which the source of breathing air is not designed to be carried by the user.

**Tight-fitting facepiece** means a respiratory inlet covering that forms a complete seal with the face.

**User seal check** means an action conducted by the respirator user to determine if the respirator is properly seated to the face.

#### V. RESPIRATORY WORKPLACE HAZARDS

1. When it is clearly impracticable to remove harmful air contaminants at their source by feasible engineering or administrative controls or by meeting the general requirements of mechanical ventilation systems, or when emergency protection against occasional and/or relatively brief exposure is needed, the District will provide approved respiratory protective equipment. Employees exposed to such hazards will be required to wear the District approved equipment. Below is a list of possible tasks when respiratory protection is needed.

**Position** Task

Groundskeeper Pesticide application

Use of pipe adhesive w/little or no

ventilation

HVAC and Maintenance Technicians Spray painting application of oil-based paint

or little/no ventilation available,

LCH under-sink trap clean out and working

with acid solutions

Working within lab fume hoods and

mechanical ducts

Welding and brazing

Faculty/Lab Technicians Chemical pour off, blending and bulking

without use of laboratory hood

Scene shop spray painting (oil-based)

Cadaver examination and dissection

Ceramics shop clean up and clay mixing

Working with fire safety applications

Working with respiratory therapy

applications

Nurse Working with patients

Dual strapped dust masks may be worn for the following tasks:

Groundskeeper Using blower, grass cutting and leaf raking

Custodians, Maintenance Technicians Dusting

Surface preparation for painting

Nurse Suspecting TB exposure

#### VI. PROGRAM EVALUATION

- 1. The respiratory protection Program Administrator is responsible for conducting annual and ongoing evaluations of the respiratory protection program to identify deficiencies and to make corrections when problems are identified during the assessment process or as needed. The evaluation includes:
  - a. Verifying that there are no feasible alternatives to respirators (eliminate the need for respirators, reduce the level of respiratory protection by using less toxic materials or by implementing engineering controls or administrative controls)
  - b. Regular workplace evaluations for respiratory hazards (are the correct respirators being used and worn properly)
  - c. Obtain the active involvement of employees in reviewing and updating the respiratory program (consult regularly with employees to learn their views on program effectiveness and to identify problems); employee assessment must determine whether respirators are
    - 1. Interfering with effective workplace performance
    - 2. Properly fitted
    - 3. Correctly selected for the hazards that employees encountered
    - 4. Being worn properly and used when necessary
    - 5. Being properly maintained
  - d. Evaluate any feedback information or surveys

## VII. MEDICAL EVALUATIONS

- 1. Any employee required to wear respiratory protective equipment must be physically able to perform the tasks while wearing a respirator and shall not wear such equipment until medically approved.
- 2. All students required to wear respiratory protective equipment must be physically able to perform the tasks while wearing a respirator and shall not wear such equipment until medically approved. Students must be evaluated and fit tested prior to the start of their clinical and field rotations.
- 3. For each employee required to wear a respirator, Crafton Hills College will provide a medical questionnaire (Appendix D or other questionnaire determined by the Program Administrator) to determine the employee's ability to use a respirator before the employee is fit tested or required to use the respirator in the workplace. The medical questionnaire will be reviewed by a physician or licensed health care professional (PLHCP). The PLHCP will determine if the employee is medically cleared for respirator usage or request a follow-up medical examination.
- 4. A follow-up medical examination will be provided to any employee who gives a positive response to any question in Section 2, Part A, questions 1-8 of the medical questionnaire, or any employee so determined by the PLHCP. The follow-up medical examination will include any medical tests,

- consultations, or diagnostic procedures the PLHCP deems necessary to make a final determination. The PLHCP will provide the college with a written recommendation regarding the employee's ability to use a respirator.
- 5. All medical questionnaires and examinations shall be administered in a confidential manner during the employee's normal working hours (or at a time and place convenient to the employee). The employee will also be provided the opportunity to discuss the questionnaire and/or results of the examination with the PLHCP.
- 6. Crafton Hills College will provide the PLHCP with the following information before the PLHCP makes a determination concerning the employee's or student's ability to use a respirator:
  - a. The type and weight of the respirator to be used
  - b. The duration and frequency of respirator use
  - c. The expected physical work effort during required respirator use
  - d. Additional protective clothing to be worn (if any)
  - e. Environmental factors such as temperature and humidity extremes that may be encountered
  - f. A copy of CCR, Title 8 Section 5144
- 7. Fit testing is required annually. Medical clearances are required a minimum of every two (2) years. However, reevaluation will be conducted under these circumstances:
  - a. Employee or student reports physical symptoms that are related to the ability to use a respirator (wheezing, shortness of breath, chest pain, etc.)
  - b. It is identified that an employee is having a medical problem during respirator use or observations made during fit testing
  - c. The healthcare professional performing the evaluation determines an employee needs to be reevaluated and the frequency of the evaluation
  - d. A change occurs in the workplace conditions that may result in an increased physiological burden on the employee
  - e. Employee or student facial size/shape/structure has changed significantly

8. Medical evaluations will be performed as follows:

Department	Physician or other Licensed Health Care Professional			
	(PLHCP)			
CHC Employees	3M Respiratory Medical Exam (Online)			
	Additional medical evaluation and test Loma Linda			
	University Medical Center (LLUMC)			
EMS Students 3M Respiratory Medical Exam (Online), Pr				
	Physician or Health and Wellness Center			
Fire Technology Students	3M Respiratory Medical Exam (Online), Primary Care			
	Physician or Health and Wellness Center			
Respiratory Technology	3M Respiratory Medical Exam (Online), Primary Care			
Students	Physician or Health and Wellness Center			

#### VIII. FIT TESTING

- 1. Before any employee or student is required to use a respirator (negative or positive-pressure face-piece), the person must be fit tested with the same make, model, style, and size of the respirator to be used. After the initial fit test, subsequent fit testing will be conducted annually and:
  - a. If the model of the respirator available for use changes
  - b. If the employee or student changes weight by 10% or more
  - c. If the employee or student has any changes in facial structure or scarring
- 2. The fit test shall not be conducted if there is any hair growth between the skin and the face-piece sealing surface, such as stubble beard growth, beard, mustache, or sideburns that cross the respirator sealing surface. Any such interfering hair must be moved or removed to avoid compromising the respirator seal. Any type of apparel that interferes with a satisfactory fit shall be altered or removed.
- 3. If any individual exhibits breathing difficulty during the tests, he or she shall be referred to a physician or other licensed health-care professional, as appropriate, to determine whether the individual can wear a respirator while performing his or her duties.
- 4. If the individual finds the fit of the respirator unacceptable, he or she shall be given the opportunity to select a different respirator and be retested.
- 5. Fit tests will be administered using Cal/OSHA accepted qualitative fit test (QLFT) or quantitative fit test (QNFT) protocol. Fit testing of air supplying respirators (SCBA) will be performed in the negative pressure mode regardless of the mode of operation.
- 6. Qualitative fit testing will be performed with Isoamyl Acetate, irritant smoke, or an aerosol saccharin solution. Quantitative fit testing, when used, will be performed with a Porta-Count or similar instrument.

7. The table below lists the department and fit testing method.

Department	QLFT	QNFT	Fit Testing Responsibility	
Anatomy & Physiology	Primary	Secondary	Public Safety and Emergency Services	
EMS	Primary	Secondary		
Fire Technology	N/A	Primary		
Health & Wellness	Primary	Secondary		
Respiratory Tech	Primary	Secondary		
Maintenance and	Primary	Secondary	Administrative Services	
Operations (if				
necessary)				

- 8. The use of air-purifying, filter cartridge respirators is strictly prohibited in oxygen deficient atmospheres. Only supplied-air SCBA respirators may be used in these atmospheres.
- 9. Complete fit testing procedures are described in Appendix A.

#### IX. USE OF RESPIRATORS

- Employees and students will use their respirator in accordance this program and the training they receive on the use of the selected model(s). In addition, the respirator shall not be used in a manner for which it is not certified by the National Institute for Occupational Safety and Health (NIOSH) or by its manufacturer.
- 2. Employees and students (except Public Safety personnel, see 2.6.3) will be limited to the use of negative pressure, air-purifying (filter cartridge) respirators. This is based on the foreseeable exposures normally encountered by non-Public Safety employees and students. The only exception for non-Public Safety employees and students would be an employee or student deemed unable to use a negative pressure respirator by the PLHCP. In this case a powered air-purifying respirator (PAR) may be required. These instances will be handled on a case-by-case basis by the Program Administrator.
- 3. All employees and students shall leave a potentially contaminated work area if the respirator is causing physical symptoms or the respirator no longer offers adequate protection (for example strap breaks, becomes saturated with fluid, etc.)
- 4. All respiratory equipment must be NIOSH approved and used in compliance with manufacturer's instructions.
- 5. Filter cartridges must be labeled and color-coded with the NIOSH approval label. Filter cartridges must be equipped with an end-of-service-life indicator (ESLI). An ESLI is a system to warn the user of the approach of the end of the useful life

of the cartridge. This may be a manufacturer's warning regarding the taste or smell of a contaminant while using the respirator or a system by which filter cartridges are changed out on a periodic basis based on manufacturer's recommendations. When filter cartridges are to be changed out on a periodic basis, they must be labeled with the date of first use.

#### 6. Fit Checks

- a. All employees and students shall conduct user seal checks according to the manufacturer recommendations each time they wear a respirator. Employees and students who wear respirators cannot have facial hair that comes between the sealing surface of the face piece and the face, or that interferes with the respirators functions.
- b. Employees will be required to perform fit checks before fit testing and each time the respirator is put on before entering a hazardous area. Two fit checks will be performed as part of the fit check procedure. These are:
- c. Positive pressure fit check performed by placing the heel of the hand over the exhalation valve cover, pressing lightly and exhaling gently. The face piece should bulge slightly with no air leaks detected between the face and face piece; and
- d. Negative pressure fit check performed by placing the palms of both hands over the filter holes or inhalation valves and gently inhaling for 5 to 10 seconds. The face piece should collapse slightly with no air leaks detected between the face and face piece.
- e. If air leakage is detected for either of the two checks, then 1) the respirator should be repositioned on the face; 2) the straps tension should be readjusted; or 3) the respirator should be changed.
- f. Complete user fit check procedures are described in Appendix B.

## 7. Atmospheres Immediately dangerous to Life or Health (IDLH)

- a. Atmospheres immediately dangerous to life or health (IDLH) are those atmospheres that pose an immediate threat to life, would cause irreversible health effects, or impair an individual's ability to escape. In instances where IDLH atmospheres are encountered the following shall apply:
  - 1. The only approved respirator will be a full-face pressure demand SCBA
  - 2. A minimum of two persons, equipped with SCBA's must be on the job.
  - 3. A minimum of one person, equipped with SCBA must be available as a standby.
  - 4. Communication (visual, voice, signal line) must be maintained between all individuals present.
  - 5. The standby person must be trained and equipped to provide effective

#### 8. Wear and Deterioration

a. The College requires each employee required to wear respiratory protective equipment to notify the Program Director, Dean, or Program Administrator of any damage, defects, wear or deterioration found in their equipment. The College will repair or replace respiratory protective equipment as required due to wear or deterioration.

#### X. VOLUNTARY RESPIRATOR USE

- 1. There may be occasions where employees opt to wear respirators although respirator use would not be required under this program. This type of usage is termed "voluntary use". In these cases, the employee will furnish their own equipment. If an employee chooses to voluntarily use a respirator the College must ensure the following:
  - a. The voluntary usage will not itself create a hazard
  - b. The respirator is cleaned, stored, and maintained properly, and
  - c. The information contained in Appendix F is provided to the employee.

Exception: voluntary use respirator requirements do not include filtering face-pieces such as dust masks.

#### XI. RESPIRATOR SELECTION

 The college will select and provide the appropriate respirator based on the respiratory hazards to which the employee will be exposed. Respirator selection must ensure that employee exposure will not exceed published Permissible Exposure Limits (PEL), Threshold Limit Values (TLV), or Short-Term Exposure Limits (STEL). Respirators currently approved by Crafton Hills College for use are listed in Appendix E.

## XII. BREATHING AIR QUALITY – SUPPLIED AIR ONLY

- 1. This section describes the air quality requirements that the District will follow when employees are using SCBA or air line-supplied respirators (Public Safety only).
- 2. The supplied-air system typically will consist of an SCBA or compressor, air delivery lines, air cleaning apparatus, a reserve air supply and NIOSH approved masks. The system will provide at minimum, the following:
  - a. A continuous sufficient supply of air
  - b. Air meeting Grade D requirements
  - c. Adequate escape time
  - d. NIOSH approved respirators and air supply hoses

3. Breathing air (compressed air, compressed oxygen, liquid air and liquid oxygen) will be of high purity, free from harmful dusts, fumes, mists, vapors or gases, and meet the following Grade D requirements:

a. Oxygen 19.5% to 23.5%

b. Condensed hydrocarbons less than 5 milligrams per

cubic meter

c. Carbon Monoxide less than 10 ppm

d. Carbon Dioxide less than 1000 ppm

e. No pronounced or objectionable odors

- 4. Oxygen will meet the requirements of the United States Pharmacopoeia for medical or breathing oxygen. Compressed oxygen will not be permitted for use in supplied air respirators or in open circuit self-contained breathing apparatus that have previously used compressed air. Oxygen must never be used with air line respirators.
- 5. Breathing air may be supplied from cylinders or air compressors. Breathing gas containers will be clearly and legibly identified with the word AIR or OXYGEN as appropriate with letters at least 1/25 the diameter of the cylinder but never less than 1/8". The letters will be stenciled, stamped or labeled as near the valve end as possible.
- 6. If a compressor is necessary, then the compressor will be a breathing air-type compressor. The compressor will be equipped with the necessary safety and standby devices. In addition to being constructed and situated so as to prevent the entry of contaminated air into the system, the compressor will have suitable in-line air purifying sorbent beds and filters installed to further assure breathing air quality. A receiver of sufficient capacity will be provided to enable the respirator wearer to escape from a contaminated atmosphere should the compressor fail. The compressor will be equipped with alarms to indicate a compressor failure or overheating. Oil-lubricated compressors will be equipped with:
  - a. a continuous reading carbon monoxide monitoring system set to alarm if the carbon monoxide concentration reaches 10 ppm;
  - b. or a high temperature alarm set at 110% of the normal operating temperature;
  - c. or both.
- 7. If only a high temperature alarm is used, the air from the compressor will be tested for carbon monoxide concentrations for each use or weekly, whichever is less frequent. All compressor alarms will be tested at least monthly. The results for all testing will be documented and maintained by the Public Safety Department for at least six (6) months.

8. All air line couplings will be incompatible with outlets for other gas systems to prevent inadvertent servicing of air-line respirators with nonrespirable gases or oxygen. The air pressure at the hose connection to positive pressure respiratory equipment will be maintained within the range specified by the equipment.

#### XIII. RESPIRATOR MAINTENANCE

1. The college requires a maintenance program for all respiratory protective equipment issued to and used by college personnel. The Program Administrator will ensure that the maintenance program has been implemented and is being followed. Damage or defects discovered during any portion of the maintenance program shall be brought to the attention of Program Administrator, who will ensure that appropriate corrective action is taken.

# 2. Respirator Inspection

- a. All respiratory equipment will be inspected under the following schedule:
- b. Before and after each use by the wearer
- c. After cleaning and disinfection
- d. At least monthly for respirators not routinely used which are kept ready for emergency use
- e. While inspecting respirators, check the structural integrity looking for any nicks, abrasions, cuts, or creases in the seal area or if the filter material is physically damaged or soiled. Check the respirator straps to be sure they are not cut or otherwise damaged. Make sure the metal nose clip is in place and functions properly (if applicable).
- f. Any damage noted by the inspection should be reported to Program Administrator immediately. Respirators found damaged or defective shall be immediately removed from service and will not be returned to service until properly repaired.

#### 3. Respirator Cleaning

- a. The District will provide appropriate cleansing and sanitizing materials. The respirator user will be responsible for cleaning and sanitizing respirators as frequently as necessary to ensure sanitary protection is provided the wearer. Respiratory protective equipment that may be used by more than one individual will never be passed from one person to another until it has been cleaned and sanitized.
- b. Respirator cleaning is to be done in accordance with the manufacturer's recommendations. However, as a minimum guideline, each respirator should be cleaned in a mild soap solution, double rinsed and air dried prior to storage. The Program Administrator will ensure that all cleaning and maintenance guidelines are followed.

4. Complete respirator inspection and maintenance procedures are described in Appendix C.

#### XIV. RESPIRATOR STORAGE

1. After cleaning, inspection, and air drying, the respirator shall be stored to protect against dust, sunlight, extreme temperatures, excessive moisture, or damaging chemicals. Respirators placed at work stations for emergency use will only be stored in clearly marked compartments or containers designed for that purpose and will be located where they are quickly accessible. Routinely used respirators may be placed in plastic bags and stored in cabinets, lockers or tool boxes, provided that the face piece and exhalation valve rest in a normal position and their functioning will not be impaired by the elastic setting in an abnormal position. Cartridge filters may also be stored in plastic bags, but separately from the clean respirator.

## XV. TRAINING

- 1. Employees shall be provided respiratory protection training upon initial assignment to jobs where a respirator has been determined necessary and at least annually thereafter unless it is determined through a workplace reevaluation that respiratory protection is no longer necessary. Department Deans are responsible for ensuring completion of training (reference Appendix G for Respiratory Protection Program Training Checklist).
- 2. To ensure proper respirator selection, use, maintenance and storage, the College will provide all employees required to wear respiratory protection with education and training. The education and training will cover (reference Appendix G CHC Respiratory Protection Training Checklist):
  - a. A review of the written respiratory program
  - b. Medical evaluations
  - c. Selection, use, capabilities, and limitations of respirators
  - d. Proper inspection, donning, and removal of the respirator
  - e. Fit checks: how to do and frequency
  - f. Fit testing
  - g. Procedures to follow if an atmosphere immediately hazardous to life or health is encountered
  - h. How to care for, maintain, and store the respirator
  - i. Other required personal protective equipment, if needed

#### 3. Refresher Training

a. Refresher training for employees required to use respiratory protection will be conducted annually. Refresher training will include the elements described in the Training section above.

## XVI. DOCUMENTATION AND RECORDKEEPING

1. A written copy of the program can be found in the office of each department Dean and online at: http://www.sbccd.org/District\_Faculty\_,-a-

,\_Staff\_Information-

Forms/Environmental Health and Safety/Safety Programs/Respiratory Protection Program.aspx.

- 2. The Program Administrator will ensure that the following records are kept as part of the District Respiratory Protective Equipment Program:
  - a. Training documentation
  - b. Fit testing results
  - c. Medical approvals
  - d. Workplace air monitoring results
  - e. Inspections of respirators designated for emergency use, with a record of the most recent inspection maintained on the respirator or its storage container.
- 3. The original records will be kept in the office of each department's Dean. Records of fit testing shall be maintained by the Dean for at least 3 years. Human Resources maintains medical information for all employees covered under the respiratory protection program. Completed medical forms and documented medical recommendations are confidential. All relevant medical information must be maintained for the duration of the employment of the individual plus thirty years.

# APPENDIX A FIT TESTING PROCEDURES

### APPENDIX A - FIT TESTING PROCEDURES

## I. Who Needs to be Fit Tested?

- A. Any full or part-time employee whose duties require the use of respiratory protection. See below for information related to part-timers who work ONLY in the hospital setting.
- B. Any student whose classroom, clinical, or field experience requires respiratory protection.

# II. Medical Clearances for Employees

- A. All employees (including student workers) who are required to be fit tested must first have medical clearance.
- B. The Program Administrator and Supervisors (VP Administrative Services and Deans) are responsible for identifying the employees who need to be fit tested and sending the list of names and assignments to Administrative Services.
- C. The firm CHC is using for preliminary testing is 3M, which provides an online option. Profiles for different jobs/fields have been created by Administrative Services to assure that the proper questions are addressed.
- D. When Administrative Services receives the list of employees, they match the employee to the correct profile and then informs the employee to complete the online evaluation.
- E. Once the employee completes the online evaluation, any "red flags" are identified that require additional medical evaluation. The employee and Administrative Services will receive an email showing the employee status (passed or referral). Administrative Services will then notify the administrator if the employee is medically cleared. If the employee passes, he/she is ready for fit testing.
- F. If the employee requires additional medical evaluation, they will be referred to LLU.
- G. Facilitators/Professional Experts who work at their own organization (clinical/field classes for CHC students) need to provide proof of recent (within in one year) fit test to the appropriate Dean or Program Administrator.

#### III. <u>Fit Testing for Employees</u>

- A. Qualitative fit tests shall be performed in an area with adequate ventilation to prevent exposure of the person conducting the fit test or the build-up of irritant smoke in the general atmosphere. Rooms approved for qualitative fit testing are the EMS lab (OE1-115) or other locations designated by the Program Administrator.
- B. Quantitative fit tests will be performed in locations designated by the fit tester.
- C. Scheduled times for fit testing shall be coordinated by the fit tester.
- D. In Instruction, the Deans are responsible for coordinating fit testing for employees.
- E. Employees must also complete the online training module in respiratory protection prior to fit testing. The module will be accessed through Safe Colleges on the district website.
- F. As noted above, a fit tester must be certified to conduct the testing. At this time, the following people\* are approved to perform fit testing as applicable to their respective areas.
  - 1. Fire Tech: Dan Sullivan, Matt Smerber, and Rich Solometo
  - 2. Anatomy and Physiology, Emergency Medical Services (EMS), Health and Wellness Center, Respiratory Tech: Robin Bishop, John Commander, and Eileen Verosik
    - \* Part-time employees performing fit tests will be paid for their time by establishing non-instructional contracts.

- G. As a part of fit testing, employees will be trained in "donning and doffing" equipment. The entire process should take about an hour and part-time employees will be paid for 2 hours to cover the training and the evaluation time.
- H. Once fit testing is completed and the employee passes, the tester provides a card to the employee and sends an email to Administrative Services (to the Administrative Coordinator). Administrative Services will then inform HR and the Administrator. The tester will forward the hard copy of the fit test record to HR.
- I. FOR HOSPITAL BASED EMPLOYEES If preceptors have been trained and tested in their work environment and will use the hospitals equipment, the Dean shall obtain training records and fit test records from such employees.

# IV. On-the-Job Training Requirements

A. The Deans are responsible for providing site-specific training related to respiratory protection. As training is performed, the Dean shall submit a record of the training to HR.

# V. Purchase Order for Faculty Supplies

A. Each fiscal year, an open PO will be established with the Bookstore to provide required respiratory protection equipment for faculty who are required to wear these items as part of their responsibilities.

## VI. Medical Clearances for Students

- A. The program director, clinical director, instructor, or their designee is responsible for identifying the students who need to be fit tested and sending the list of student names (including email addresses and phone numbers) to the department secretary or lab technician.
- B. CHC is using 3M for medical clearances, which provides an online questionnaire. Profiles for different programs/jobs/fields have been created to assure that the proper questions are addressed.
- C. Students will be required to pay a \$28 fee at the Bookstore prior to receiving a login and password to the 3M website.
- D. To verify payment, the student is required to bring the receipt from the Bookstore to the department secretary or lab technician.
- E. Once verification of payment is received, the department secretary or lab technician matches the student to the correct profile, obtains a unique personal login for the student, then informs the student to complete the online evaluation.
- F. The program director, instructor, or designee shall instruct students on the timely completion of the medical questionnaire.
- G. The student goes to the 3M website (www.respexam.com)
- H. Click on "Employees: start your respirator medical questionnaire."
- I. Login to the web site using a unique personal login provided to the student by the department secretary or lab technician.
- J. Student then fills out the on-line questionnaire and submits it for evaluation. If the student has questions while filling out the questionnaire, they may call 3M at 800-383-3393 between the hours of 8am and 4pm Central Standard Time.
- K. Once the student has submitted the questionnaire, the student and the department secretary or lab technician will receive an email showing the student's status (passed or referral) within one (1) business day after completion of the questionnaire.

- L. If cleared, the students shall print out and take the completed medical clearance back to the program director, clinical director, or instructor who will then coordinate the fit testing.
- M. If referred, the "red flags" are identified that require additional medical evaluation. The department secretary or lab technician will then notify the program director, clinical director, instructor or designee if the student is medically cleared. If the student passes, he/she is "medically cleared" and ready for fit testing.
- N. If the student requires a medical evaluation, the following procedures shall be followed:
  - a. The student will be referred to the Health and Wellness Center (HWC) or, if desired, the student may use their own doctor/healthcare provider. If referred to the HWC, the student will be required to set an appointment with the HWC for further evaluation. The HWC is located at SSB-101; phone number is (909) 389-3272.
  - b. The student must print out a copy of the completed questionnaire from the 3M website and bring it with them to the doctor.
  - c. Upon the successful completion of the evaluation, the healthcare provider/doctor signs the questionnaire and the student or health care professional must fax the signed questionnaire to 3M at 1-877-609-3832. Once 3M receives the student's signed and completed questionnaire, 3M emails the student with a medical clearance (if cleared).
  - d. Students shall print out and take the completed medical clearance back to the program director, clinical director, or instructor who will then coordinate the fit testing.
- O. Documentation and Record Keeping:
  - a. All data is stored indefinitely by 3M, behind a firewall, on a secure server. CHC does not have access to the students' private health information. However, in the event the medical information is required, an inquiry can be made to 3M at 800-383-3393.
- P. Medical clearances are valid for two (2) years; however, fit testing must be performed annually.

## VII. Fit Testing for Students

- A. The student shall consult with the fit tester or designee to determine the appropriate size of mask to purchase prior to fit testing. The program director, clinical director, and fit tester shall coordinate the time a place for preliminary mask sizing.
- B. The program director, clinical director, instructor, or designee will coordinate a time and an appropriate place for fit testing
- C. Once the student is tested, the fit tester will send an email and provide hard copy records to the program director, clinical director, instructor, or designee. The tester also provides the student with a card.

## OSHA Fit Testing Procedures – can be found online at:

http://www.dir.ca.gov/title8/5144a.html

# APPENDIX B

# **USER SEAL CHECK PROCEDURES**

#### **OSHA User Seal Check Procedures**

## http://www.dir.ca.gov/title8/5144b\_1.html

The individual who uses a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and negative pressure checks listed in this appendix, or the respirator manufacturer's recommended user seal check method shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

- I. Facepiece Positive and/or Negative Pressure Checks.
  - A. Positive pressure check. Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.
  - B. Negative pressure check. Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.
- II. Manufacturer's Recommended User Seal Check Procedures. The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that the employer demonstrates that the manufacturer's procedures are equally effective.

## **NOTE**

Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

### **HISTORY**

1. New appendix B-2 to section 5144 filed 8-25-98; operative 11-23-98 (Register 98, No. 35).

# APPENDIX C

# RESPIRATOR CLEANING PROCEDURES

# **OSHA Respirator Cleaning Procedures**

http://www.dir.ca.gov/title8/5144b\_2.html

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here in Appendix B-2. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth in Appendix B-2, i.e., must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

- I. Procedures for Cleaning Respirators.
- A. Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.
- B. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.
- C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.
- D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
  - 1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,
  - 2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,
  - 3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
- E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

- F. Components should be hand-dried with a clean lint-free cloth or air-dried.
- G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.
- H. Test the respirator to ensure that all components work properly.

# NOTE

Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

# HISTORY

1. New appendix B-2 to section 5144 filed 8-25-98; operative 11-23-98 (Register 98, No. 35).

# APPENDIX D

# MEDICAL EVALUATION QUESTIONNAIRE

# APPENDIX D - MEDICAL EVALUATION QUESTIONNAIRE

I. <u>Student Medical Evaluation Ouestionnaire</u> can be found and filled in electronically on the CHC website at the addresses below. These forms are prepopulated with program specific information. The web addresses are as follows:

Fire Technology Questionnaire and Medical Clearance Form:

<a href="http://www.craftonhills.edu/Courses">http://www.craftonhills.edu/Courses</a> and Programs/Divisions and Departments/

<a href="Career">Career</a> and Human Development/Public Safety and Services/Fire Technology
<a href="https://www.craftonhills.edu/Courses">aspx</a>

## EMS Questionnaire and Medical Clearance Form:

http://www.craftonhills.edu/Courses and Programs/Divisions and Departments/ Career and Human Development/Public Safety and Services/Emergency Medical Services.aspx

Anatomy and Physiology Questionnaire and Medical Clearance Form:

http://www.craftonhills.edu/Courses\_and\_Programs/Divisions\_and\_Departments/

Arts\_and\_Sciences/Physical\_and\_Biological\_Sciences/Anatomy\_and\_Physiology\_aspx

- II. SBCCD Employees Medical Evaluation Ouestionnaires and Medical Clearance forms: Follow procedures outlined in Appendix A, Item II.
- III. <u>OSHA Respirator Medical Evaluation Questionnaire (for reference)</u> <a href="http://www.dir.ca.gov/title8/5144c.html">http://www.dir.ca.gov/title8/5144c.html</a>

# APPENDIX E

RESPIRATOR SELECTION

#### APPENDIX E - RESPIRATOR SELECTION

- I. Basis for Selection of Respirators
  - A. Respirators shall be chosen based on identification and evaluation of hazard, in accordance with the NIOSH Respirator Decision Logic.
    - i. Hazard identification shall include a review of the chemicals in use with respect to their hazards, the availability of respirators for the chemical, and the potential of exposures.
    - ii. If any air monitoring has been done to determine the level of exposures, this data will be considered in respirator selection.
- II. Only NIOSH approved respirators shall be used. Parts and cartridges shall be used only with the mask for which they are intended.

# **Current Respirators & Filters for Qualified Employees**

Brand Name	Mask Style	Filter Cartridge Type	Work Task/Hazard	Department
3M	7000	3M 6005 Formaldehyde/Organic Vapor	Formaldehyde Mitigation	A&P
Draeger	Panorama Nova Air Boss Evolution		Fire Training	Fire Technology
Varies	Dust Masks	NA	Respiratory Irritants (dust)	M&O
Varies	P100	NA		EMS
Varies	N95	NA		EMS & M&O

# APPENDIXF

# INFORMATION FOR VOLUNTARY RESPIRATOR USE

# OSHA Information for Employees Using Respirators When Not Required Under the Standard

Handout for employees who choose to wear a respirator (if the employer allows this practice), even though one is not deemed necessary.

# http://www.dir.ca.gov/title8/5144d.html

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.

#### **NOTE**

Authority cited: Section 142.3, Labor Code. Reference: Section 142.3, Labor Code.

#### HISTORY

1. New appendix D to section 5144 filed 8-25-98; operative 11-23-98 (Register 98, No. 35).

# APPENDIX G

**CHC Respiratory Protection Training Checklist** 

# APPENDIX G - CHC Respiratory Protection Training Checklist

# **Employees can demonstrate knowledge of:**

The general requirements and review of this program and the OSHA respiratory protection standard.

Medical evaluation process for fit testing.

Why the respirator is necessary.

How improper fit, usage or maintenance can compromise the protective effect of the respirator.

The limitations and capabilities of the respirator.

How to use the respirator effectively in emergencies including situations in which the respirator malfunctions.

How to inspect, put on and remove, use and check the seals of the respirator.

The procedures for maintenance and storage of the respirator.

How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.

Personal protective equipment (PPE) required to perform work tasks.

Where to go to find a written copy of CHC's Respiratory Protection Program.

Training is understandable to employees.

Training is provided prior to employee use of a respirator.

Appendix D of the OSHA standard (APPENDIX F of this program) is provided to voluntary users.

## **Retraining must be provided:**

- 1. Annually.
- 2. Upon changes in workplace conditions that affect respirator use.
- 3. Because of inadequate knowledge on the part of an employee.
- 4. Whenever retraining appears necessary to ensure safe respirator use.