Respiratory Protection Program

California State University, Bakersfield

CALIFORNIA STATE UNIVERSITY
BAKERSFIELD
Safety and Risk Management

Revised January 2019

Revised May 2019

Revised May 2022

Revised May 2023

Table of Contents

1.0 INTRODUCTION

This program specifies the procedures used to comply with CAL OSHA respiratory protection requirements set forth in California Code of Regulations. Prior to utilization of respiratory protective equipment (RPE), control of atmospheric contamination should be achieved by use of adequate ventilation and engineering controls, and/ or substitution of less toxic materials whenever possible. The program is administered by the Office of Safety, Risk, & Sustainability (SRS). Supervisors are responsible for implementation at job sites.

2.0 AUTHORITY

1. Title 8, CCR §1529 Asbestos
2. Title 8, CCR §1531 Respiratory Protective Equipment
3. Title 8, CCR §5144 Control of Hazardous Substances
4. Title 8, CCR §5208 Regulated Carcinogens

3.0 PURPOSE

The California State University, Bakersfield (CSUB) Respiratory Protection Program (RPP) establishes procedures for CSUB employees who are exposed to hazardous chemical substances or atmospheres such as dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors that may adversely affect personal health. Respirators are used to reduce exposures when engineering controls cannot. CSUB strives to limit employee exposures to harmful chemical or physical agents to concentrations less than permissible exposure levels. The RPP program includes:

- Responsibilities
- Selection of Respirators
- Medical Evaluations
- Voluntary Use of Respirators, Filtering Facepiece
- Assignment and Fit Testing
- Proper Use of Respirators
- Maintenance, Care, and Cleaning of Respirators
- Training and Information

- Record Keeping
- Program Evaluation

4.1 RESPONSIBILITIES

4.2 Safety, Risk, & Sustainability Will:

The Director of Safety, Risk, & Sustainability is the designated qualified program administrator and will administer the program and all required evaluations of the RPP. SRS staff will:

- Develop, implement, and review the RPP in compliance with Title 8, California Code of Regulations.
- Assist departments in complying with program requirements.
- Review and approve all department purchases of respiratory protection equipment.
- Provide training for employees who use a respirator on respiratory protection, standards, and criteria for selecting, fit testing, use, and maintenance of respirators.
- Develop and implement a campus wide medical monitoring program for respiratorusers.
- Conduct periodic inquiries to ensure managers and supervisors whose employees use a respirator, document routine inspections for equipment usage, maintenance, and storage.
- Maintain records indicating the brand and type of respirator used by each employee, the date the employee was fit tested, and the date the employee received respiratortraining.
- Conduct evaluations of the workplace to ensure respirators are appropriate for hazards.

4.3 Departments Will:

- Request SRS staff determine what specific tasks require the use of a respirator.
- Contact SRS for assistance in exploring options that may be used to eliminate the need for a respirator.
- If a respirator is deemed necessary, follow SRS recommendations and provide proper respiratory equipment to meet the needs of each specific application.
- Ensure that employees attend training.
- Ensure that personnel comply with the CSUB RPP, including respirator inspection and maintenance.

4.4 Employee Will:

- Use common sense and good judgment at all times; and minimize exposures to airborne contaminants.
- Read and comply with procedures, while performing assigned duties.
- Utilize respiratory protective equipment in accordance with instruction and training provided.
- Inform supervisor of any personal health problems that could be aggravated by using respiratory protective equipment.
- Report observed or suspected malfunctioning respirator immediately.
- Use only the specific brand, model and size of respiratory protective equipment for which training and fit testing have been provided.
- Conduct positive and negative pressure fit tests prior to each respiratoruse.
- Ensure that the assigned respirator is inspected, cleaned, disinfected, repaired, andstored.
- Attend all training and ensure attendance roster is signed.
- Request additional training or assistance when uncomfortable or unclear with information provided relative to personal safety.

5.0 SELECTION, APPROVAL AND PROCUREMENT OF RESPIRATORS

Safety, Risk, & Sustainability will assist departments in determining the vendors to acquire the appropriate selection of respiratory protection for employees.

5.1 Selection

Respirator selection will be based on the nature and degree of anticipated hazards, and the guidance issued in ANSI Standard Z88.2 – 200X.

The following will be considered when selecting a respirator:

- Atmospheric hazards, including exposure limits and warning properties,
- Activity performed and exposure time,
- Weight and limitations of the equipment,
- Environmental factors,

- Service life of cartridges, and
- Unusual hazards in the surrounding area.

5.2 Approval

Whenever respirators are required to be used to control harmful exposures, only respirators approved by the National Institute for Occupational Safety and Health (NIOSH) will be purchased and used.

5.3 Procurement

Departments are responsible for ensuring that an adequate stock of respirators, filters and/or cartridges are maintained. When respiratory protection is required, an appropriate respirator shall be provided at no cost to the employee. When respiratory protection is NOT required, procurement of elastomeric or filtering facepiece respirators is at the discretion of the Department Head or Supervisor. SRM will perform exposure monitoring upon request to document exposure levels and make determination of "voluntary" or "required" use.

5.4 Asbestos Workers

Single use, disposable respirators are not approved for asbestos related work. A powered air purifying respirator (PAPR), or air purifying half mask respirator will be provided to any employee required to conduct asbestos related work. Air monitoring data will guide the selection of the type of respirator to be used for asbestos work. Table 1 specifies selection guidelines for respirators used for protection from asbestos. Supervisors will forward project and product information to SRS prior to ordering respirators or cartridges to assure that appropriate equipment has been selected.

Table 1
Respiratory Protection for Asbestos

Hazard	Respirator Type
Not more than 1 f/cc, (10 X PEL)	Elastomeric air purifying, half mask w/ HEPA filters
Not more than 5 f/cc, (50 X PEL) *	Full face piece air-purifying respirator equipped with HEPA filters.

Not more than 100 f/cc, (1000 X PEL) *	Any powered air purifying respirator equipped with HEPA filters or any supplied air respirator operated in continuous flow mode.
Not more than 100 f/cc, (1000 X PEL) *	Full face piece respirator operated in pressure demand mode.
More than 100 f/cc, (1000 X PEL) * or unknown concentration	Full face piece supplied air respirators operated in pressure contact demand mode, equipped with an auxiliary positive pressure SCBA
Note: Respirators assigned for high environmental concentrations may be used at lower concentrations, or when required respirator use is independent of concentration. A high efficiency filter (HEPA) means a filter that is at least 99.97% effective against particles 0.3 microns in diameter or larger.	

6.0 MEDICAL EVALUATION

CSUB has a complete Occupational Medical Monitoring Program in place for all employees required to use a respirator. The program includes:

- Pre-employment medical evaluation,
- Annual medical monitoring, and
- End of employment / exit monitoring

The Occupational Medical Monitoring Program:

- Identifies the employees that require periodic medical monitoring because of their routine assignments.
- Complies with federal and state regulations for respirator use.

Employees are not assigned to tasks requiring the use of respirators unless it has been determined that they are physically able to perform the work while using the respiratory equipment.

CSUB provides a confidential medical evaluation 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 cost of medical evaluation is paid for by the employee's assigned department.

6.1 Medical History

Each employee whose required to use a respirator must complete a Respirator Medical Evaluation Questionnaire, Appendix D. Employees who desire to voluntarily use a respirator (other than a filtering facepiece) must complete appendix D and appendix F and take an initial medical exam.

- The medical questionnaire is administered confidentially during the employee's normal working hours or at a time and place convenient to the employee.
- The medical questionnaire is administered in a manner that ensures that the employee understands its content.
- Employees who use a respirator intermittently may have their medical questionnaire evaluated by Central Valley Occupational Medical Group or CSUB Student Health Services, and a follow- up medical examination will be provided for an employee who gives any affirmative response to any question in Section 2, Part A, of Appendix D, the Medical Questionnaire.
- Employees are provided with the opportunity to discuss their medical questionnaire and physical exam with the medical provider.
- Results of the questionnaire and any follow-up examinations are confidential between the medical provider, SRS and the employee.

6.2 Physical Exam

In determining the employee's ability to use a respirator, CSUB will obtain a written recommendation regarding the employee's ability to use the respirator from the medical provider. The recommendation will provide only the following information:

- Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether the employee is medically able to use the respirator;
- The need, if any, for follow-up medical evaluations; and
- A statement that the medical provider has provided the employee with a copy of the respirator clearance card.

6.3 Follow-up Medical Evaluation/Examination

Regulations regarding respiratory protection do not require an annual review of the medical status of employees who wear respirators periodically or voluntarily; however, additional medical evaluations are provided when:

- An employee reports medical signs or symptoms that are related to ability to use a respirator;
- A medical provider, supervisor, or the respirator program administrator informs the employer that an employee needs to be reevaluated;
- Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation; or
- A change occurs in workplace conditions (e.g., physical work effort, protective clothing, and temperature) that may result in a substantial increase in the physiological burden placed on an employee.

7.0 VOLUNTARY USE

Prior to permitting voluntary use, the supervisor must ensure that any employee using a respirator voluntarily is medically able to use that respirator and that use of a respirator will not in itself create a hazard. Employees desiring to use a respirator must submit to a medical exam, medical questionnaire or both through CSUB's OMMP, or produce a respirator medical clearance from their private physician. If the supervisor or SRS determines that voluntary respirator use is permissible, the employee will be provided with the information contained in CCR; Title 8 §5144 Information for Employees Using Respirators When Not Required Under the Standard. (see Appendix 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.

8.0 EMERGENCY USE OF RESPIRATORS

Air purifying respirators may only be used for emergency response when the exposure level to chemicals of concern will not exceed the IDLH levels. Entry into known levels of chemicals contamination may only be performed by air purifying respirator's when the following criteria are met:

- Atmosphere has enough oxygen (19.5% minimum)
- Cartridge / canister has enough capacity,
- Cartridge / canister has an end of service life indicator and
- Contaminant has adequate warning properties.

Entry into unknown levels of chemical contamination may only be performed by qualified Fire Department personnel. (Note: Where IDLH or unknown concentrations exist, CSUB will isolate and deny entry into the area and request assistance.)

9.0 TRAINING AND INFORMATION

SRS staff trains employees on specific respirator use. The training curriculum contains:

- The use of respiratory protection, including normal use and emergencysituations;
- The limitations of respiratory protection;
- The care and maintenance of the respiratory protection equipment;
- How proper fit, usage, or maintenance affects protection of the respirator;
- How to inspect, put on / remove, use, and check the seals of the respirator;
- Care, maintenance and storage of the respirator;
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; and
- The conditions under which employees may use respiratorsvoluntarily.

10.0 FIT TESTING

After receiving a medical clearance permitting the use of a designated respirator, employees required to use a respirator with a tight-fitting facepiece will be fit tested annually using the qualitative fit test (QLFT) protocol (Refer to Appendix C: Mandatory Fit Testing Procedures) using Bitrex challenge agent.

The purpose of fit testing is to identify the respirator that is best suited for each employee. Fit testing also provides an opportunity to check for problems with the personal respirator and reinforces respirator training by giving employees a chance to put on the respirator.

Fit testing is required before the initial use of a respirator, prior to an employee using a different respirator, and at least annually. The requirement includes employees who wear respirators for asbestos and/or lead related work.

- Until an employee can be fitted properly, the employee must not be assigned to tasks that require a respirator under this program and/or CCR, Title 8, sec. 5144, 5199, 5208 or any Cal/OSHA standard requiring the use of respiratory protection.
- An additional fit test is required whenever the employee reports changes, when a supervisor, respiratory program administrator or medical provider observes changes in the employee's physical condition that could affect respirator fit such as facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

10.1 Bitrex Challenge Agent Threshold Sensitivity Test

This portion of the test is to determine that the employee can identify the Bitrex challenge agent. Bitrex is prepared and placed in a nebulizer. The employee is subjected to the several squeezes of Bitrex from the nebulizer while holding the mouth open slightly, with the tongue extended. If employee reports a taste, the sensitivity portion of the test is recorded as passed. If the employee fails to detect the taste after 30 squeezes, the employee is not sensitive to Bitrex and the test will be terminated, and the employee will be marked as failing to response to the challenge agent. Another agent protocol will need to be used to conduct qualitative testing.

10.2 Qualitative Fit Test Procedure

The qualitative fit test is a subjective test that is either pass or fail. If Bitrex is tasted the respirator is an unacceptable fit. If the agent is not tasted, the respirator passes. During the test, the employee dons the respirator and after 5 minutes is asked to perform the user seal check. At that point, several exercises will be performed in the fit test hood with the challenge agent. If the challenge agent is detected by the employee at any time during the fit test, the test will stop and after a brief break (15 minutes) another respirator will be selected and the employee will be re-tested. The process repeats until the challenge agent is not detected. At that time, it is determined the respirator fits: the make, model and size are recorded. Once a respirator is fitted, only a respirator of the same make, model, style and size may be worn. If necessary, the employee can be fitted in multiple respirators as needed to ensure adequate protection. The detailed protocol is Appendix C.

11.0 PROPER USE OF RESPIRATORS

- Employees are not permitted to use tight-fitting respirators when facial hair (or any other condition) comes between the sealing surface of the facepiece and the face, interferes with valve function.
- Employees wearing corrective glasses or goggles, or other personal protective equipment should ensure the face to face seal of the respirator remains intact.
- Employees shall change respirator cartridge / canister when breakthrough of the contaminant is noted or when breathing becomes difficult or uncomfortable. Where

- and end of service life indicator is not present, a change out schedule shall be used.
- Each time an employee puts on a tight-fitting respirator, a seal check using the procedures listed in Appendix C-1: User Seal Checklist Procedures (Mandatory), must be performed.

12.1 MAINTENANCE, CARE, AND CLEANING OF RESPIRATORS

12.2 Cleaning and Disinfecting

Employees required to use respirators are issued individual respirators. The employee is responsible for ensuring they are clean, sanitary and working at the start of their shift. The program administrator and/or departmental supervisors are responsible for ensuring respirators are cleaned and disinfected using the mandatory procedures in Appendix C-2: Respirator Cleaning Procedures. The respirators are cleaned and disinfected in the following intervals:

- Respirators issued for the exclusive use of an employee are cleaned and disinfected as often as necessary to be maintained in a sanitary condition;
- Respirators issued to more than one employee are cleaned and disinfected before being worn by different individuals;
- Respirators maintained for emergency use are cleaned and disinfected after each use; and
- Respirators used in fit testing and training are cleaned and disinfected after each use, prior to testing and between users.

12.3 Storage

Employees are to store respirators to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and chemicals. Respirators are stored in a manner that prevents deformation of the facepiece and exhalation valve.

12.4 Inspection

Employees are to inspect personal respirators before each use and during cleaning. Inspection will include a check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the facepiece, head straps, valves, valve cover, filter gasket, connecting tube, and cartridges, canisters or filters; and a check of elastomeric parts for elasticity and signs of deterioration.

12.5 Repairs

The program administrator and/or departmental supervisors ensure defective respirators are discarded or repaired only by persons trained to make repairs or adjustments. Replacement parts are NIOSH- approved parts designed for the specific respirator.

13.0 RECORD KEEPING

Records to document employee training and fit testing will be maintained for at least 3 years in SRS. Medical evaluations and exposure monitoring will be kept for thirty years after the employee leaves the university. Problems encountered during the year will be documented until the next program review to ensure the issue is address with the next revision.

14.0 PROGRAM EVALUATION

SRS will conduct periodic inspections to ensure that the written respiratory protection program is being implemented and that respiratory protective equipment is appropriate to the hazards encountered. Employees are consulted to obtain input regarding the program's effectiveness. SRS staff will seek similar employee consultations during respiratory protection training sessions and work area visits. The program will be evaluated using the Respiratory Protection Program Evaluation (Refer to Appendix J).

Appendix A Listing of Respirators and Cartridges in Use

Respirator Type	Cartridges Used	Department	Hazards
3M PAPR Full Face 6900 (L) 6800 (M), 6884, 7800 (S)	HEPA Filter	FM Asbestos Worker Welder Lead Work SRS Staff	Asbestos Fumes Silica Dust Lead
3M ½ Mask 6300 (L) 6200 (M) 6100 (S)	HEPA Filter Multi-gas Vapor/HEPA	Asbestos Worker Painter SRS Staff Pesticide Applicator	Asbestos Aerosols Organic Acid Gas Pesticides
3M R-Series Hood Breathe Easy PAPR NBC ER Response Respirator	NBC Canister Mulit-gas Vapror/HEPA	SRS Staff	Organic Acid Gas Tear Gas
North Full Face Adv 1000	CN/CS	University Police	Tear Gas
North Full Face 76008A (M) 5400 (S)	Multi-gas Vapor/HEPA NBC Canister	SRS Staff	Organic Acid Gas Tear Gas
North Full Face Adv 3000	CBRN	University Police	Tear Gas
MSA ½ Mask 2130 (M)	HEPA Multi-gas Vapor / HEPA	SRS Staff	Asbestos Organic Acid Gas
Moldex N95	Single Use	Custodial Grounds	Dust
Gerson N95	Single Use	Health Center Staff	Tb Exposure

Appendix B Employee Listing of Respirators Used

Name	Department	Type of Respirator(s)	Hazards	Last Training/ Refresher:

INDIVIDUAL CHART WITH CURRENT EMPLOYEE INFORMATION IS AVAILABLE IN THE Safety, Risk, & Sustainability OFFICE

Appendix B - 1 Employee Listing of Voluntary Respirators Used

Name	Department	Type of Respirator(s)	Hazards	Last Training/ Refresher:

INDIVIDUAL CHART WITH CURRENT EMPLOYEE INFORMATION IS AVAILABLE IN THE Safety, Risk, & Sustainability OFFICE

Appendix C Section 5144: Fit Testing Procedures (Mandatory)

Part I. OSHA-Accepted Fit Test Protocols

A Fit Testing Procedures -General Requirements. The employer shall conduct fit testing using the following procedures. The requirements in this appendix apply to all OSHA-accepted fit test methods, both QLFT and QNFT.

1 The test subject shall be allowed to pick the most acceptable respirator from enough respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

2 Prior to the selection process, the test subject shall be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine an acceptable fit. A mirror shall be available to assist the subject in evaluating the fit and positioning of the respirator. This instruction may not constitute the subject's formal training on respirator use, because it is only a review.

3 The test subject shall be informed that he/she is being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.

4 The test subject shall be instructed to hold each chosen facepiece up to the face and eliminate those that obviously do not give an acceptable fit.

5 The more acceptable facepieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn at least five minutes to assess comfort. Assistance in assessing comfort can be given by discussing the points in the following item A.6. If the test subject is not familiar with using a respirator, the test subject shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.

6 Assessment of comfort shall include a review of the following points with the test subject and allowing the test subject adequate time to determine the comfort of the respirator.

(a) Position of the mask on the nose

(b) Room for eye protection

(c) Room to talk

(d) Position of mask on face and cheeks

7 The following criteria shall be used to help determine the adequacy of the respiratorfit:

(a) Chin properly placed;

(b) Adequate strap tension not overly tightened;

(c) Fit across nose bridge;

(d) Respirator of proper size to span distance from nose to chin;

(e) Tendency of respirator to slip;

(f) Self-observation in mirror to evaluate fit and respirator position.

8 The test subject shall conduct a user seal check, either the negative and positive pressure seal checks described in Appendix B-1 or those recommended by the respirator manufacturer which provide equivalent protection to the procedures in Appendix B-1. Before conducting the negative and positive pressure checks, the subject shall be told to seat the mask on the face by moving the head from side-to-side and up and down slowly while taking in a few slow deep breaths. Another facepiece shall be selected and retested if the test subject fails the user seal check tests.

9 The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble beard growth, beard, mustache or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.

10 If a test subject exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the test subject can wear a respirator while performing her or his duties.

11 If the employee finds the fit of the respirator unacceptable, the test subject shall be given the opportunity to select a different respirator and to be retested.

12 Exercise regimen. Prior to the commencement of the fit test, the test subject shall be given a description of the fit test and the test subject's responsibilities during the test procedure. The description of the process shall include a description of the test exercises that the subject will be performing. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.

13 The fit test shall be performed while the test subject is wearing any applicable safety

14 equipment that may be worn during actual respirator use which would interfere with respiratorfit.

15 Test Exercises.

(a) Employers must perform the following test exercises for all fit testing methods prescribed in this appendix, except for the CNP quantitative fit testing protocol and the CNP REDON quantitative fit testing protocol. For these two protocols, employers must ensure

that the test subjects (i.e., employees) perform the exercise procedure specified in section I.C.4(b) of this appendix for the CNP quantitative fit testing protocol, or the exercise procedure described in section I.C.5(b) of this appendix for the CNP REDON quantitative fit-testing protocol. For the remaining fit testing methods, employers must ensure that employees perform the test exercises in the appropriate test environment in the following manner:

(1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.

(2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.

(3) Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.

(4) Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).

(5) Talking. The subject shall talk out loud slowly and loud enough to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

B Grimace. The test subject shall grimace by smiling or frowning. (This applies only to QNFT testing; it is not performed for QLFT) Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist. Normal breathing. Same as exercise (1).

Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The test subject shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

Fit Test (QLFT) Protocols

The mandated methods using isoamyl acetate, saccharin solution, and irritant smoke (Stannic Chloride) are not used for qualitative fit testing at CSUB. Quantitative Fit Test (QNFT) Protocols are not used at CSUB. (Note: Any person may submit to OSHA an application for approval of a new fit test protocol. See the regulations for specific information on the process for submitting an application.)

Bitrex grTM (Denatonium Benzoate) Solution Aerosol Qualitative Fit Test Protocol.

The Bitrex TM (Denatonium benzoate) solution aerosol QLFT protocol uses the published saccharin test protocol because that protocol is widely accepted. Bitrex is routinely used as a taste aversion agent in household liquids which children should not be drinking and is endorsed by the American Medical Association, the National Safety Council, and the American Association of Poison Control Centers. The entire screening and testing procedure shall be explained to the test subject prior to

the conduct of the screening test.

(a) Taste Threshold Screening. The Bitrex taste threshold screening, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the taste of Bitrex.

(1) During threshold screening as well as during fit testing, subjects shall wear an enclosure about the head and shoulders that is approximately 12 inches (30.5 cm) in diameter by 14 inches (35.6 cm) tall. The front portion of the enclosure shall be clear from the respirator and allow free movement of the head when a respirator is worn. An enclosure substantially like the 3M hood assembly, parts #14 and #15 combined, is adequate.

(2) The test enclosure shall have a 3/4-inch (1.9 cm) hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle.

(3) The test subject shall don the test enclosure. Throughout the threshold screening test, the test subject shall breathe through his or her slightly open mouth with tongue extended. The subject is instructed to report when he/she detects a bitter taste.

(4) Using a DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent, the test conductor shall spray the Threshold Check Solution into the enclosure. This Nebulizer shall be clearly marked to distinguish it from the fit test solution nebulizer.

(5) The Threshold Check Solution is prepared by adding 13.5 milligrams of Bitrex to 100 ml of 5% salt (NaCl) solution in distilled water.

(6) To produce the aerosol, the nebulizer bulb is firmly squeezed so that the bulb collapses completely and is then released and allowed to fully expand.

(7) An initial ten squeezes are repeated rapidly and then the test subject is asked whether the Bitrex can be tasted. If the test subject reports tasting the bitter taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes completed.

(8) If the first response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the Bitrex is tasted. If the test subject reports tasting the bitter taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes completed.

(9) If the second response is negative, ten more squeezes are repeated rapidly and the test subject is again asked whether the Bitrex is tasted. If the test subject reports tasting the bitter taste during the third set of ten squeezes, the screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes completed.

(10) The test conductor will take note of the number of squeezes required to solicit a taste response.

(11) If the Bitrex is not tasted after 30 squeezes (step 10), the test subject is unable to taste Bitrex and may not perform the Bitrex fit test.

(12) If a taste response is elicited, the test subject shall be asked to take note of the taste for reference in the fit test.

(13) Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.

(14) The nebulizer shall be thoroughly rinsed in water, shaken to dry, and refilled at least each morning and afternoon or at least every four hours.

(b) Bitrex Solution Aerosol Fit Test Procedure.

(1) The test subject may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test.

(2) The fit test uses the same enclosure as that described in 4. (a) above.

(3) The test subject shall don the enclosure while wearing the respirator selected according to section I. A. of this appendix. The respirator shall be properly adjusted and equipped with any type particulate filter(s).

(4) A second DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent is used to spray the fit test solution into the enclosure. This nebulizer shall not be clearly marked to distinguish it from the screening test solution nebulizer.

(5) The fit test solution is prepared by adding 337.5 mg of Bitrex to 200 ml of a 5% salt (NaCl) solution in warm water.

(6) As before, the test subject shall breathe through his or her slightly open mouth with tongue extended and be instructed to report if he/she tastes the bitter taste of Bitrex.

(7) The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of the fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test.

(8) After generating the aerosol, the test subject shall be instructed to perform the exercises in section I. A. 14. of this appendix.

(9) Every 30 seconds the aerosol concentration shall be replenished using one half the number of squeezes used initially (e.g., 5, 10 or 15).

(10) The test subject shall indicate to the test conductor if at any time during the fit test the taste of Bitrex is detected. If the test subject does not report tasting the Bitrex, the test is passed.

(11) If the taste of Bitrex is detected, the fit is deemed unsatisfactory and the test is

failed. A different respirator shall be tried and the entire test procedure is repeated (taste threshold screening and fit testing).

Appendix C-1 Section 5144: User Seal Check Procedures (Mandatory)

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 substituting for qualitative or quantitative fit tests.

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.

C 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.

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.

Appendix C-2 Section 5144: Respirator Cleaning Procedures (Mandatory)

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.

Procedures for Cleaning Respirators.

1 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.

2 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.

3 Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.

4 When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following: 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, 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, Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.

5 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.

6 Components should be hand-dried with a clean lint-free cloth orair-dried.

7 Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.

8 Test the respirator to ensure that all components work properly.

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

Appendix D Section 5144 OSHA Respirator Medical Evaluation Questionnaire

(Mandatory) CALIFORNIA STATE UNIVERSITY, BAKERSFIELD
MEDICAL QUESTIONNAIRE IN ACCORDANCE WITH
CAL/OSHA RESPIRATORY PROTECTION STANDARD,
TITLE 8, CALIFORNIA CODE OF REGULATIONS §5144,

Appendix C to Section 5144 OSHA Respirator Medical Evaluation Questionnaire (Mandatory)

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: ☐ 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.

Answer all questions to the best of your ability:

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: _____
4. Sex: ☐ Male ☐ Female
5. Your height: _____ ft. _____ in.
6. Your weight: _____ lbs.
7. Your job title: _____
8. Telephone number: _____
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? ☐ Yes ☐ No

11. Check the type of respirator you will use (you can check more than one category):

☐
☐

Disposable respirator (filter-mask, non-cartridge type only, N, R or P).

Other type _____

12. Have you ever worn a respirator: ☐**Yes** ☐**No**

If ``yes,'' what type(s):

☐ Half- face ☐ Full- piece ☐ Powered-air purifying respirator

☐ Supplied-air ☐ Self-contained breathing apparatus

Section 2: (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator.

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?

Seizures (fits)	☐ YES	☐ NO	Trouble smelling odors	☐ YES	☐ NO
Diabetes	☐ YES	☐ NO	Claustrophobia	☐ YES	☐ NO
Allergic reactions that interfere with your breathing	☐ YES	☐ NO			

3. Have you ever had any of the following pulmonary or lung problems?

Asbestosis	☐ YES	☐ NO	Asthma	☐ YES	☐ NO
Chronic bronchitis	☐ YES	☐ NO	Emphysema	☐ YES	☐ NO
Pneumonia	☐ YES	☐ NO	Tuberculosis	☐ YES	☐ NO
Silicosis	☐ YES	☐ NO	Collapsed lung	☐ YES	☐ NO
Lung cancer	☐ YES	☐ NO	Any chest injuries or surgeries	☐ YES	☐ NO
Broken ribs	☐ YES	☐ NO	Any other lung problem	☐ YES	☐ NO

4. Do you currently have any of the following symptoms of pulmonary or lung illness?

Shortness of breath ☐ YES ☐ NO

Shortness of breath when walking fast on level ground or walking up a slight hill or incline ☐ YES ☐ NO

Shortness of breath when walking with other people at an ordinary pace on level ground ☐ YES ☐ NO

Must stop for breath when walking at your own pace on level ground ☐ YES ☐ NO

Shortness of breath when washing or dressing yourself	YES	NO
Shortness of breath that interferes with your job	YES	NO
Coughing that produces phlegm (thick sputum)	YES	NO
Coughing that wakes you early in the morning	YES	NO

Coughing that occurs mostly when you are lying down ☐ YES ☐ NO

Coughing up blood in the last month ☐ YES ☐ NO

Wheezing ☐ YES ☐ NO

Wheezing that interferes with your job ☐ YES ☐ NO

Chest pain when you breathe deeply ☐ YES ☐ NO

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?

Heart attack ☐ YES ☐ NO

Angina ☐ YES ☐ NO

High blood pressure ☐ YES ☐ NO

Stroke ☐ YES ☐ NO

Heart failure ☐ YES ☐ NO

Heart arrhythmia (heart beating irregularly) ☐ YES ☐ NO

Swelling in your legs or feet (not caused by walking) YES NO

Any other heart problem that you've been told about ☐ YES ☐ NO

☐ ☐

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

Frequent pain or tightness in your chest ☐ YES ☐ NO

Pain or tightness in your chest during physical activity ☐ YES ☐ NO

Pain or tightness in your chest that interferes with your job ☐ YES ☐ NO

In the past two years, have you noticed your heart skipping or missing a beat ☐ YES ☐ NO

Heartburn or indigestion that is not related to eating YES NO

Any other symptoms that you think may be related to heart or circulation problems ☐ YES ☐ NO

☐ ☐

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

Breathing or lung problems ☐ YES ☐ NO

Seizures (fits) ☐ YES ☐ NO

Blood pressure ☐ YES ☐ NO

Heart trouble ☐ YES ☐ NO

(If you've never used a respirator, check the following space and go to the next section) ☐

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

☐ ☐ ☐ ☐

☐ ☐ ☐ ☐

Eye irritation	YES	NO	Skin allergies or rashes	YES	NO
Anxiety	YES	NO	General weakness or fatigue	YES	NO

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 – 15 below must be answered by every employee who has been selected to use either a full-face piece 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?

Wear contact lenses ☐ Yes ☐ No Wear glasses ☐ Yes ☐ No

Color blind ☐ Yes ☐ No

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?

Difficulty hearing ☐ Yes ☐ No Wear a hearing aid ☐ Yes ☐ No

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?

Back pain ☐ Yes ☐ No

Weakness in any of your arms, hands, legs, or feet ☐ Yes ☐ No

Difficulty fully moving your arms and legs ☐ Yes ☐ No

Pain and stiffness when you lean forward or backward at the waist ☐ Yes ☐ No

Difficulty fully moving your head up or down ☐ Yes ☐ No

Difficulty fully moving your head side to side Yes No ☐ ☐

Difficulty bending at your knees Yes No ☐ ☐

Difficulty squatting to the ground Yes No

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

Any other muscle or skeletal problem that interferes with using a respirator? Yes No

I AFFIRM THAT ALL THE ANSWERS AND STATEMENTS ON THIS FORM ARE COMPLETE AND TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Employee Signature Date

Appendix E Section 5208 Asbestos Supervisor / Contractor Medical E v a l u a t i o n Questionnaire (Mandatory)

MEDICAL QUESTIONNAIRE IN ACCORDANCE WITH CAL/OSHA RESPIRATORY PROTECTION STANDARD, TITLE 8, CALIFORNIA CODE OF REGULATIONS §5208, Appendix D to Section 5208 Asbestos Supervisor / Contractor Medical Evaluation Questionnaire (Mandatory)

This mandatory appendix contains the medical questionnaires that must be administered to all employees who are exposed to asbestos above the permissible exposure limit, and who will therefore be included in their employer's medical surveillance program.

Part 2 includes the abbreviated Periodical Medical Questionnaire, which must be administered to all employees who are provided periodic examinations under the medical surveillance provisions of the standard.

PERIODIC MEDICAL QUESTIONNAIRE

1. Name _____

2. Social Security# (Last 4) _____ 3. Clock # (CSUB ID#) _____

4. Present Occupation _____ 5. Plant (Work Location) _____

6. Address 7. Zip Code 8. Telephone #

_____ _____ _____

9. Interviewer _____ 10. Date _____

11. Date of Birth (MM-DD-YY) _____ 12. Place of Birth _____

13. Sex: ☐ Male ☐ Female

14. What is your marital status?

☐ Single ☐ Married ☐ Widowed ☐ Separated/Divorced

15. Race: ☐ White ☐ Black ☐ Asian ☐ Hispanic ☐ Indian ☐

Other 16: What is the highest grade completed in school?

OCCUPATIONAL HISTORY

17A Have you ever worked full time (30 hours per week or more) for 6 months or more? ☐ Yes ☐ No

IF YES to 17A:

B. Have you ever worked for a year or more in a dusty job? ☐ Yes ☐ No ☐ Does not apply

Specify Job/Industry ____ Total years worked _____

Was dust exposure: ☐ Mild ☐ Moderate ☐ Severe

C. Have you ever been exposed to gas or chemical fumes in your work? ☐ Yes ☐ No

Specify Job/Industry ____ Total years worked: _____

Was exposure: ☐ Mild ☐ Moderate ☐ Severe

D. What has been your usual occupation or job (the one you have worked the longest)?

Job/occupation? _____ Number of years at this occupation?_____

Position/job title? _____ Business, field or industry: _____

Have you ever worked:

E. In a mine? ☐ Yes ☐ No F. In a Quarry? ☐ Yes ☐ No

G. In a foundry? ☐ Yes ☐ No H In a pottery? ☐ Yes ☐ No

I. In a cotton, flax or hemp mill? ☐ Yes ☐ No J. With asbestos? ☐ Yes ☐ No

18. PAST MEDICAL HISTORY

A. Do you consider yourself to be in good health? ☐ Yes ☐ No

IF NO, state reason _

B. Have you any defect of vision? ☐ Yes ☐ No

IF YES, State nature of defect: _____

C. Have you any hearing defect? ☐ Yes ☐ No

IF YES, State nature of defect: _____

D. Are you suffering from or have you ever suffered from:

Epilepsy? ☐ Yes ☐ No Rheumatic fever? ☐ Yes ☐ No

Kidney disease? ☐ Yes ☐ No Bladder disease? ☐ Yes ☐ No

Diabetes?	Yes	No	Jaundice?	Yes	No

19. CHEST COLDS AND CHEST ILLNESSES

19 A. If you get a cold, does it usually go to your chest? (Usually means more than 1/2 the time)
☐ Yes ☐ No ☐ Don't get colds

20 A. During the three years, have you had any chest illnesses that have kept you off work, indoors at home, or in bed? ☐ Yes ☐ No

IF YES to 20A

B. Did you produce phlegm with any of these chest illnesses? ☐ Yes ☐ No ☐ Does Not Apply

C. In the past three years, how many such illnesses with (increased) phlegm did you have which lasted a week or more? ☐ Number of illnesses:____
☐ No such illnesses

21. Did you have any lung trouble before the age of 16? ☐ Yes ☐ No

22. Have you ever had any of the following?

1 A. Attacks of bronchitis? ☐ Yes ☐ No

If Yes to 1 A

B. Was it confirmed by a doctor? ☐ Yes ☐ No ☐ Does Not Apply

C. At what age was your first attack? Age in years:_____ ☐ Does Not Apply

2 A. Pneumonia (including bronchopneumonia)? ☐ Yes ☐ No

If Yes to 2 A

B. Was it confirmed by a doctor? ☐ Yes ☐ No ☐ Does Not Apply

C. At what age was your first attack? Age in years:_____ ☐ Does Not Apply

3 A. Hay fever? ☐ Yes ☐ No

If Yes to 3 A

B. Was it confirmed by a doctor? ☐ Yes ☐ No ☐ Does Not Apply

C. At what age was your first attack? Age in years:_____ ☐ Does Not Apply

23 A. Have you ever had chronic bronchitis? ☐ Yes ☐ No

If Yes to 23 A

B. Do you still have it? ☐ Yes ☐ No ☐ Does Not Apply

C. Was it confirmed by a doctor? ☐ Yes ☐ No ☐ Does Not Apply

D. At what age did it start? Age in years:_____ ☐ Does Not Apply

24 A. Have you ever had emphysema? ☐ Yes ☐ No

If Yes to 24 A

B. Do you still have it? ☐ Yes ☐ No ☐ Does Not Apply

C. Was it confirmed by a doctor? ☐ Yes ☐No ☐ Does Not Apply

D. At what age did it start? Age in years:_____ ☐ Does Not Apply

25 A. Have you ever had asthma? ☐ Yes ☐ No

If Yes to 25 A

B. Do you still have it? ☐ Yes ☐No ☐ Does Not Apply

C. Was it confirmed by a doctor? ☐ Yes ☐No ☐ Does Not Apply

D. At what age did it start? Age in years:_____ ☐ Does Not Apply

E. If you no longer have it, at what age did it stop? Age stopped:_____ ☐ Does Not Apply

26. Have you ever had:

A. Any other chest illness? ☐ Yes ☐ No **IF YES,** please specify: _____

B. Any chest operations? ☐ Yes ☐ No **IF YES,** please specify: _____

27 A. Has a doctor ever told you that you have heart trouble? ☐ Yes ☐ No

If Yes to 27 A

B. Have you ever had treatment for heart trouble in the past 10 years? ☐ Yes ☐ No ☐ Does Not Apply

28 A. Has a doctor ever told you that you had high blood pressure? ☐ Yes ☐ No

If Yes to 28 A

B. Have you ever had treatment for high blood pressure (hypertension) in the past 10 years? ☐ Yes ☐ No ☐ Does Not Apply

29. When did you last have your chest x-rayed:_____(year)

30. Where did you have your chest x-rayed (if known)? _____

What was the outcome? _____

FAMILY HISTORY

31. Were either of your natural parents ever told by a doctor that they had a chronic lung condition such as:

A. Chronic Bronchitis?

Father: ☐ Yes ☐ No ☐ Don't know

Mother: ☐ Yes ☐ No ☐ Don't know

B. Emphysema?

Father: ☐ Yes ☐ No ☐ Don't know

Mother: ☐ Yes ☐ No ☐ Don't know

C. Asthma?

Father: ☐ Yes ☐ No ☐ Don't know

Mother: ☐ Yes ☐ No ☐ Don't know

D. Lung Cancer?

Father: ☐ Yes ☐ No ☐ Don't know

Mother: ☐ Yes ☐ No ☐ Don't know

E. Other chest conditions?

Father: ☐ Yes ☐ No ☐ Don't know

Mother: ☐ Yes ☐ No ☐ Don't know

F. Is parent currently alive?

Father: ☐ Yes ☐ No ☐ Don't know

Mother: ☐ Yes ☐ No ☐ Don't know

G. Please specify:

Father:_____Age if living _____Age at Death ☐ Don't know

Mother:_____Age if living _____Age at Death ☐ Don't know

Please specify cause of death:

Father_____

_____Mother

COUGH

32 A. Do you usually have a cough? ☐ Yes ☐ No **(if no, skip to question 32C.)**
(Count cough with first smoke or on first going out of doors. Exclude clearing of throat.)

B. Do you usually cough as much as 4 to 6 times a day 4 or more days out of the week? ☐ Yes ☐ No

C. Do you usually cough at all on getting up or first thing in the morning? ☐ Yes ☐ No

D. Do you usually cough at all during the rest of the day or at night? ☐ Yes ☐ No

IF YES TO ANY OF THE ABOVE (32A, B, C OR D), ANSWER THE QUESTIONS BELOW. IF NO TO ALL, CHECK DOES NOT APPLY AND SKIP TO NEXT PAGE. ☐

E. Do you usually cough like this on most days for 3 consecutive months or more during the year? ☐ Yes ☐ No ☐ Does not apply

F. For how many years have you had the cough? Number of years:_____ ☐ Does not apply

33A. Do you usually bring up phlegm from your chest? (Count phlegm with the first smoke or on first going out of doors. Exclude phlegm from the nose. Count swallowed phlegm.)
☐ Yes ☐ No **(If no, skip to 33C)**

B. Do you usually bring up phlegm like this as much as twice a day 4 or more days out of the week? ☐ Yes ☐ No

C. Do you usually bring up phlegm at all on getting up or first thing in the morning? Yes No

D. Do you usually bring up phlegm at all during the rest of the day or at night? ☐ Yes ☐ No

IF YES TO ANY OF THE ABOVE (33A, B, C OR D), ANSWER THE QUESTIONS BELOW. IF NO TO ALL, CHECK DOES NOT APPLY AND SKIP TO 34A.

E. Do you bring up phlegm like this on most days for 3 consecutive months or more during the ☐ year? Yes ☐ No ☐ Does not apply

F. For how many years have you had trouble with phlegm? Number of years:_____ ☐ Does not apply

EPISODES OF COUGH AND PHLEGM

34A. Have you had periods or episodes of (increased*) cough and phlegm and lasting for 3 3 weeks or more each year? *(For persons who usually have cough and/or phlegm) ☐ Yes ☐ No

IF YES TO 34A

B. For how long have you had at least 1 such episode per year? Number of years:_____ ☐ Does not apply

WHEEZING

35A. Does your chest ever sound wheezy or whistling?

1. When you have a cold? ☐ Yes ☐ No
2. Occasionally apart from colds? ☐ Yes ☐ No
3. Most days or nights? ☐ Yes ☐ No

IF YES TO 1, 2, or 3 in 35A

B. For how many years has this been present? Number of years:_____ ☐ Does not apply

36A. Have you ever had an attack of wheezing that has made you feel short of breath? ☐ Yes ☐ No

B. How old were you when you had your first such attack? Age in years: _____ ☐ Does not apply

C. Have you had 2 or more such episodes? ☐ Yes ☐ No ☐ Does not apply

D. Have you ever required medicine or treatment for the(se) attacks? ☐ Yes ☐ No ☐ Does not apply

BREATHLESSNESS

37. If disabled from walking by any condition other than heart or lung disease, please describe and proceed to question 39A.

Nature of condition(s) _____

☐ ☐ ☐

38A. Are you troubled by shortness of breath when hurrying on the level or walking up a slight hill?

Yes No

IF YES TO 38A

B. Do you have a walk slower than people of your age on the level because of breathlessness? Yes No Does not apply

C. Do you ever have to stop for breath when walking at your own pace on the level? Yes No Does not apply

D. Do you ever have to stop for breath after walking about 100 yards (or after a few minutes) on the level? Yes No Does not apply

E. Are you too breathless to leave the house or breathless on dressing or climbing one flight of stairs? Yes No Does not apply

TOBACCO SMOKING

39A. Have you ever smoked cigarettes? (No means less than 20 packs of cigarettes or 12 oz. of tobacco in a lifetime or less than 1 cigarette a day for 1 year.) Yes No

IF YES TO 39A

B. Do you now smoke cigarettes (as of one month ago)? Yes No Does not apply

C. How old were you when you first started regular cigarette smoking?
Age in years: _____
Does not apply

D. If you have stopped smoking cigarettes completely, how old were you when you stopped? Age stopped ___ Still smoking Does not apply

E. How many cigarettes do you smoke per day now? Cigarettes per day: _____
Does not apply

F. On the average of the entire time you smoked, how many cigarettes did you smoke per day? Cigarettes per day:____ Does not apply

G. Do or did you inhale the cigarette smoke? Does not apply Not at all Slightly Moderately Deeply

40A. Have you ever smoked a pipe regularly? (Yes means more than 12 oz. of tobacco in a lifetime.) Yes No

IF YES TO 40A:

B. 1. How old were you when you started to smoke a pipe regularly? Age: _____

2. If you have stopped smoking a pipe completely, how old were you when you stopped? Age stopped: Still smoking pipe Does not apply

C. On the average over the entire time you smoked a pipe, how much pipe tobacco did you smoke per week? ____oz per week (a standard pouch of tobacco contains 1 ½ oz.)
Does not apply

D. How much pipe tobacco are you smoking now? _____oz. per week Not currently smoking a pipe

E. Do you or did you inhale the pipe smoke? Never smoked Not at all
Slightly Moderately Deeply

41A. Have you ever smoked cigars regularly? (Yes means more than 1 cigar a week for a year).
Yes No

IF YES TO 41A FOR PERSONS WHO HAVE EVER SMOKED CIGARS

B.1. How old were you when you started smoking cigars regularly? Age: _____

2. If you have stopped smoking cigars completely, how old were you when you stopped?

Age stopped:_____ ☐ Still smoking cigars ☐ Does not apply

C. On the average over the entire time you smoked cigars, how many cigars did you smoke per week? Cigars per week:_ ☐ Does not apply

D. How many cigars are you smoking per week now? Cigars per week: _____

☐ Not currently smoking cigars

E. Do or did you inhale the cigar smoke? ☐ Never smoked ☐ Not at all ☐

☐ ☐ Slightly Moderately Deeply

Signature:_____ Date: _____

Appendix F Section 5144: Information for Employees Using Respirators When Not Required Under the Standard (Mandatory)

CSUB VOLUNTARY USE OF RESPIRATOR INFORMATION, APPENDIX D (MANDATORY)

Information for Employees Using Respirators When Not Required Under the Standard

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. **CSUB will provide employee's filtering face-piece respirators, for voluntary use, upon request; however, 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'srespirator.

VOLUNTARY USE OF FILTERING FACE-PIECE RESPIRATORS

Review each of the following points with the employee (have employee initial each line):

1. FILTERING FACE-PIECE RESPIRATORS AND OSHA REQUIREMENTS

_____ Filtering Face-piece Respirators (like dust masks) are considered true respirators according to OSHA. N95 refers to the NIOSH certification of the filter media that comprises the face-piece. N means that it is not oil resistant and 95 refers to being 95% effective at filtering particles at the 0.3-micron level.

_____ Voluntary use is defined as use for employee comfort purposes only. No hazard exists that requires use of a respirator and the use of the respirator does not produce any additional hazard.

_____ If an employee is required to wear a filtering face-piece respirator (to protect against a respiratory hazard or as required by the employer), full compliance with the University's Respirator Policy is required, which includes a medical evaluation, respirator training and fit testing.

_____ OSHA requires that all employees voluntarily wearing filtering face-piece respirators receive basic information on respirators as provided in Title 8, § 5144, Appendix D of the Respirator Standard.

2. HOW TO USE AND WEAR A FILTERING FACE-PIECE RESPIRATOR

_____ Inspect respirators prior to use, including new units out of the box. Check for rips and tears. Make sure straps are securely attached, nose piece is attached properly, and that no obvious defects exist.

_____ Beards and other facial hair negate the effectiveness of the respirator because they prevent an adequate seal between the respirator and the face.

_____ User seal checks should be done every time the mask is put on and every time it is re- adjusted on the face.

3. LIMITATIONS OF PPE

_____ Filtering face-piece respirators are only useful for protection against particulates. They are not to be used in oxygen-deficient atmospheres or atmospheres that

contain hazards that are immediately dangerous to life and health (IDLH). Odors will still be noted when using the respirator because it does not filter out gases or vapors. The respirator will not provide adequate protection if a good seal with the face is not achieved.

4. CARE, MAINTENANCE, USEFUL LIFE AND DISPOSAL OF PPE

_____ Filtering Face-piece Respirators are considered disposable PPE. They cannot be cleaned, especially when they become wet or soiled. They cannot be shared with other employees.

_____ New respirators should be stored in a clean, dry location, protected from sunlight, chemicals, water, and physical damage.

_____ Respirators can only be used in conjunction with a written respiratory protection program.

I have received training on Title 8, § 5144, Appendix D of the Respirator Standard (Information for Employees Using Respirators When Not Required Under the Standard – Filtering Face-piece ONLY) and have demonstrated an understanding of the requirements. In addition, I have received training and will heed all instructions provided by the University and manufacturer, regarding use, maintenance, cleaning, care, and warnings, regarding filtering face-piece limitations.

Employee Name Signature Date

Appendix G CCR Title 8, § 5144. Respiratory Protection Standard

The complete standard can be found at: http://www.dir.ca.gov/title8/5144.html

Important terms found in the standard are provided:

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.

Assigned protection factor (APF)

Means the workplace level of respiratory protection that a respirator or class of respirators is expected to provide to employees when the employer implements a continuing, effective respiratory protection program as specified by this section.

Atmosphere-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.

Canister or cartridge

Means a container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

Emergency

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 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 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.

Maximum use concentration (MUC)

Means the maximum atmospheric concentration of a hazardous substance from which an employee can be expected to be protected when wearing a respirator and is determined by the assigned protection factor of the respirator or class of respirators and the exposure limit of the hazardous substance. The MUC can be determined mathematically by multiplying the assigned protection factor specified for a respirator by the required OSHA permissible exposure limit, short- term exposure limit, or ceiling limit. When no OSHA exposure limit is available for a hazardous substance, an employer must determine an MUC based on relevant available information and informed professional judgment.

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 the health care services required by subsection (e).

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.

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.

Self-contained breathing apparatus (SCBA)

Means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

Service life

Means the period that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer.

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.

.

Appendix H Respiratory Protection Program Evaluation

PERSON COMPLETING EVALUATION:_____DATE:_____

Introduction: A Respiratory Protection Program should provide employees with protection against airborne contaminants they may encounter during work activities. A program evaluation is designed to identify areas needing improvement. A Self-Evaluation should be completed annually.

	YES	NO	N/A
PROGRAM ADMINISTRATOR			
An on-site Program Administrator has been designated to oversee the program.			
This person has enough knowledge or experience to oversee the RPP			
PROGRAM INCLUDES			
Procedures for appropriate respirator selection;			
Requirements for training (including documentation) of respirator users;			
Procedures for fitting and issuance of respirators;			
Requirements for ensuring the proper use of respirators both in routine and in emergency situations;			
Procedures and schedules for cleaning, storage, and maintenance of respirators;			
Procedures for medical evaluations;			
Procedures for assessing employee exposures while using respirators;			
Procedures for use in IDLH atmospheres;			
Procedures to ensure air quality, quantity, and flow of breathing air for Air-supplying respirators.			
A record or inventory of respirators issued by each office/division is maintained.			
A list of employees who are cleared and fitted for wearing respirators is maintained.			
RESPIRATOR SELECTION			
ONLY NIOSH certified respirators are used.			
Only respirators approved by Program Administrator are purchased			
Respirators / cartridges approved for specific uses (chemical, asbestos, lead, dust etc.) have been evaluated			
TRAINING			
hazards of operations using respirators and OSHA requirements;			
Limitations of respirator types and selection;			
Inspection, donning, and fit-check procedures;			
Cleaning, maintenance, and storage procedures;			
FIT TESTING			
Fit-testing is done following the Appendix A protocol by the Program Administrator or someone knowledgeable in fit-testing procedures.			
A fit-factor of 100 for a half-face and of 1000 for a full-face respirator is needed to pass a fit test.			

Fit-testing is accomplished only when nothing interferes with the face to face piece seal.			
Respirators used for fit-testing are sanitized as per Appendix B-2.			
USE OF RESPIRATORS	YES	NO	N/A
When an employee's choice of respirator or fit changes, the old respirator is turned in and a new respirator is issued.			
Lens kits are available and provided to personnel who wear glasses.			
For air-purified respirators either end of service-life indicators are used or a change schedule is implemented.			
Air sampling is performed to validate effectiveness of respiratory protection and change-out schedules for routine operations.			
CLEANING / STORAGE/ MAINTENANCE			
Respirators are stored in a manner to protect them from dust, sunlight, heat, and deformation.			
Respirators for use by more than one person are cleaned and disinfected after use.			
Malfunctioning respirators are repaired by the user for normal wear items.			
Regulators and air-supply systems are repaired by manufacturer trained personnel.			
Inspection of respirators is required before and after each use.			
MEDICAL MONITORING			
Employees using respirators beyond dust masks have been medically cleared to wear one.			
Personnel receive medical evaluation or examination annually.			
The Program Administrator reviews medical clearances to note changes in medical restrictions which may be attributed to work activities. Where needed the administrator consults with the physician to clarify limiting conditions.			
Exposure monitoring are performed if such changes occur.			
Results are expressed clearly and adequate information is provided.			
Are explanations concerning the results adequate.			
Recommendations for corrective actions are provided.			
EXPOSURE ASSESSMENT			
Exposures activities requiring respirators have been assessed.			
Specific activities have been identified as needing exposure monitoring.			
Alternate procedures, controls, and chemicals have been considered where RPP is used.			
IDLH			
Emergency use respirators are inspected and recorded monthly.			
"Emergency use" breathing gas containers are inspected monthly for gas pressure. At 90% of full pressure, the unit is taken out of service.			
RECORD KEEPING			
Equipment inspection records exist for issued respirators.			
Equipment inspection records exist for community equipment.			
Results of air monitoring and fit-testing are received by your office.			

Records are kept of the fit test and the issuance of respirators to individuals for their exclusive use.			

Reviewed by: Date:_____

Reviewed by: Date:_____