

RESPIRATORY PROTECTION PROGRAM

1.0 PURPOSE

The purpose of this Respiratory Protection Program is to protect respirator users at California State University East Bay from breathing harmful airborne contaminants and to comply with Cal/OSHA, California Code of Regulations (CCR), Title 8, Section 5144.

2.0 SCOPE

It is required for California State University, East Bay to maintain, insofar as it is reasonably within the control of the University to do so, engineering and administrative controls necessary to eliminate or minimize employee exposures to unsafe levels of airborne contaminants. When such controls are not feasible, use of personal respiratory protective equipment may be required to provide the appropriate level of protection. The University will provide the necessary respiratory protective equipment, training, medical evaluations, and procedures for those persons required to utilize such equipment. **Always read and understand the manufacturer's instructions and the NIOSH approval label for your respirator(s).**

The following use of respirators will not be performed at California State University, East Bay: (1) Respirators for immediately dangerous to life or health (IDLH) atmospheres, and (2) Respirators for emergency purposes in unknown atmospheres.

3.0 RESPONSIBILITIES

3.1 Department of Environmental Health and Safety (EHS)

- 3.1.1 Develop, implement, and monitor the Respiratory Protection Program.
- 3.1.2 Maintain a copy of the manufacturer's instructions for each type of respirator.
- 3.1.3 Assist departments in complying with program requirements, such as identification of job classification(s), duration and frequency of respirator use, expected physical work effort (type of job), additional protective clothing and equipment to be worn, and temperature and humidity extremes.
- 3.1.4 Purchase all employee respiratory protective equipment.

- 3.1.5 Stock and issue respiratory protection equipment.
- 3.1.6 Assist with the selection of respirators.
- 3.1.7 Provide training to applicable employees and supervisors.
- 3.1.8 Develop and implement a medical monitoring program for respirator users.
- 3.1.9 Evaluate respiratory hazard(s) of each job including the contaminant's chemical state and physical form, if needed.

3.2 Departments

- 3.2.1 Assist EHS with determining specific applications and exposures that require the use of respiratory equipment.
- 3.2.2 Provide EHS with the following for respirator users: job classification(s), duration and frequency of respirator use, expected physical work effort (type of job), additional protective clothing and equipment to be worn, and temperature and humidity extremes. EHS will provide the applicable type of respirator. If assistance is needed, contact EHS.
- 3.2.3 Provide updated information for (3.2.1 and 3.2.2) above to EHS.
- 3.2.4 Ensure that applicable employees are provided with training and instructions on all equipment and that all employees are completely knowledgeable of the respiratory protection requirements for the areas in which they work.
- 3.2.5 Ensure that employees comply with the University Respiratory Protection Program, including respirator inspection and maintenance.
- 3.2.6 Provide an area for cleaning, disinfecting, maintenance, and storage of respirators.
- 3.2.7 Conduct periodic visual inspections of respiratory equipment usage, maintenance, and storage. Contact EHS, if assistance is needed.
- 3.2.8 Inform EHS prior to training of any barriers to understanding; such as, language comprehension.

3.3 Employees

- 3.3.1 Use common sense and good judgment at all times; the unlimited number of potential hazards that may exist or be created in the work place is sometimes unpredictable.
- 3.3.2 Read, understand, and comply with the contents of this program and applicable procedures whether written or oral, while performing assigned duties.
- 3.3.3 Request a copy of the manufacturer's manual from EHS. A copy will be given when the respirator is issued.
- 3.3.4 Use respiratory protective equipment in accordance with all instructions and training provided by EHS and/or the employee's department.
- 3.3.5 Inform the supervisor of any personal health problems that could be aggravated by the use of respiratory protective equipment.
- 3.3.6 Guard against damage and ensure that respirators are not disassembled, modified, or otherwise altered in any way other than by the changing of respirator cartridges/filters.
- 3.3.7 Inspect respirator prior to use. Follow manufacturer instructions.
- 3.3.8 Report any observed or suspected malfunctioning respirator to a supervisor.
- 3.3.9 Use only those brands and types of respiratory protective equipment for which training and fit testing have been provided.
- 3.3.10 Notify a supervisor immediately of any changes in work conditions and/or any changes in their health or physical condition.
- 3.3.11 Job classifications for employees are listed in **Appendix VII**.

3.4 Designated Physician

- 3.4.1 Provide medical evaluations including medical examination, medical tests, consultations, or diagnostic procedures for respirator users. A medical questionnaire will be utilized to gather medical history.

- 3.4.2 Discuss the results of the questionnaire and examination with the employee.
- 3.4.3 Provide the employee's supervisor information needed to determine whether or not the employee is capable of wearing a respirator.
- 3.4.4 Provide additional medical evaluation(s) when necessary.
- 3.4.5 Provide EHS the name or identification of the employee medically tested.
- 3.4.6 Provide a copy of medical records to the employee and/or designee, upon request.

4.0 PROCEDURES FOR SELECTING RESPIRATORS

- 4.1 Select respirators based on the respiratory hazard(s) to which the employee is exposed, and the workplace and user factors that affect respirator performance and reliability.
- 4.2 Use only respirators approved by National Institute of Occupational Safety and Health (NIOSH) and use in compliance with the conditions of its certification.
- 4.3 Identify and evaluate respiratory hazard(s) of each job including the contaminant's chemical state and physical form. The evaluations will be conducted by EHS. If the employee exposure cannot be reasonably estimated, the job will be considered immediately dangerous to life or health (IDLH).
- 4.4 Select from the different models and sizes available the respirator that is most acceptable to and correctly fits the user.
- 4.5 Select a respirator based on the assigned protection factor and the maximum use concentration for atmospheres that are not IDLH.
- 4.6 Select a negative pressure air purifying respirator or a powered air purifying respirator (PAPR) for protection against gases and vapors. The change schedule for the cartridges is based on objective information. **See Appendix I.**
- 4.7 Select a negative pressure air purifying respirator or a PAPR with a NIOSH certified high efficiency particulate air (HEPA) filter for protection against particulates.

5.0 MEDICAL EVALUATIONS

- 5.1 A medical evaluation determines whether or not the user is physically and psychologically able to wear the selected respiratory protective equipment.
- 5.2 A physician or other licensed health care professional (PLHCP) will perform medical evaluations following Cal OSHA guidelines. **See Appendix II.**
- 5.3 Medical evaluations will be provided by Student Health Services to all employees whose job require the use of a respirator.
- 5.4 For UPD, Cal/OSHA has approved law enforcement agencies to determine if personnel are medically qualified to use respiratory protective equipment based on the evaluation of a POST Medical History Statement (POST 2-252), or it's equivalent, and the physical examination required by POST Regulation 1002 as a condition of employment.
- 5.5 Medical evaluations will be discontinued when the employee is no longer required to use a respirator.
- 5.6 A follow up medical examination will be provided for an employee who gives a positive response to any question among questions 1 through 8 in Section 2, Part A of the medical questionnaire, **see Appendix II.** The PLHCP will include any medical tests, consultations, or diagnostic procedures that deem to make a final determination.
- 5.7 The medical questionnaire and examination will be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire will be administered in a manner that the employee will understand its contents.
- 5.8 The employee will be allowed an opportunity to discuss the questionnaire and examination results with the PLHCP.
- 5.9 The following supplemental information will be provided by the department to the PLHCP in order for the PLHCP to make recommendations concerning an employee's ability to use a respirator:
 - 5.9.1 Type and weight of the respirator to be used by the employee.
 - 5.9.2 Duration and frequency of respirator use.
 - 5.9.3 Expected physical work effort.

- 5.9.4 Additional protective clothing and equipment to be worn.
 - 5.9.5 Temperature and humidity extremes that may be encountered.
 - 5.10 Supplemental information provided to the PLHCP previously for an employee will not be provided for a subsequent medical evaluation if the information and the PLHCP remains the same. **See Appendix X for the generic copy.**
 - 5.11 A copy of this Respiratory Protection Program will be provided to the PLHCP.
 - 5.12 In order for the employee to be determined medically capable of using a respirator, the PLHCP will provide only the following information to the employee's supervisor:
 - 5.12.1 Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator.
 - 5.12.2 The need, if any, for follow up medical evaluations.
 - 5.12.3 A statement that the PLHCP has provided the employee with a copy of the PLHCP's written recommendation.
- See Appendix VIII** for the "Medical Surveillance Program: Fit for Duty" form. This form will be completed by the PLHCP for each respirator user and forwarded to the applicable department.
- 5.13 A powered air purifying respirator (PAPR) will be provided to the employee if the PLHCP determines that a negative pressure respirator would place the employee's health at increased risk, and if a subsequent medical evaluation finds that the employee is medically able to use such respirator. If a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then a PAPR will no longer be required to be provided.
 - 5.13.1 Additional medical evaluations will be provided if:
 - 5.13.2 An employee reports medical signs or symptoms that are related to their ability to use a respirator.

5.13.3 A PLHCP, supervisor, or EHS informs management that an employee needs to be reevaluated.

5.13.4 Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation.

5.13.5 A change occurs in workplace conditions.

6.0 FIT TESTING PROCEDURES

- 6.1 Before an employee is required to use any respirator with a negative or positive pressure tight-fitting facepiece, the employee will be fit tested with the same make, model, style, and size of respirator that will be used. **See Appendix IX for fit testing form, “Consent for Respirator Fit Test.”**
- 6.2 The employee is required to pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT). The fit test will be administered using Cal/OSHA accepted QLFT or QNFT protocol. **See Appendix III.** Appendix III is an insert from Cal/OSHA Appendix A to Section 5144, “Fit Testing Procedures (Mandatory).”
- 6.3 The employee will be fit tested prior to initial use of the respirator, whenever a different respirator facepiece (size, style, model or make) is used, and at least annually thereafter.
- 6.4 An additional fit test will be conducted if the employee reports, or the PLHCP, supervisor, or EHS makes visual observations of changes in the employee’s physical condition that could affect respirator fit. Such conditions include, but are not limited to: facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.
- 6.5 The employee will be given an opportunity to select a different respirator facepiece and to be retested if the employee notifies the supervisor or EHS that the fit of the respirator is unacceptable.
- 6.6 QLFT will be used only to fit test negative pressure air purifying respirators that must achieve a fit factor of 100 or less.
- 6.7 QNFT will be use to test for tight fitting half facepieces equal to or greater than 100, or use to test for tight fitting full facepieces equal to or greater than 500, and to fit test negative pressure air purifying respirators that must achieve a fit factor of 100 or less.

- 6.8 QLFT or QNFT in the negative pressure mode will be use to fit test PAPR.
- 6.9 If modification(s) are made to the respirator facepiece during fit testing, the respirator facepiece will be restored to its NIOSH approved configuration, before that facepiece will be used on a job.
- 6.10 **Note:** The 3M 8500 Comfort Mask is not a respirator. Therefore, no fit testing is required.

7.0 USE OF RESPIRATORS

- 7.1 No IDLH use of respirators is permitted at CSU, East Bay.
- 7.2 Tight-fitting facepieces will not be worn by employees with facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function or any condition that interferes with face-to-facepiece seal of valve function.
- 7.3 Corrective glasses or goggles or other personal protective equipment will not be worn in a manner that will interfere with the seal of the facepiece to the face of the user.
- 7.4 For tight-fitting respirators, the employee will perform a user seal check each time they put on the respirator. **See Appendix IV for instructions.** Appendix IV is an insert from Cal/OSHA Appendix B-1 to Section 5144, “User Seal Check Procedures (Mandatory).”
- 7.5 Respirators will be reevaluated when work area conditions or degree of employee exposure or stress may affect respirator effectiveness.
- 7.6 Employees will leave the respirator use area for the following:
 - 7.6.1 To wash their faces and respirator facepieces as necessary to prevent eye or skin irritation.
 - 7.6.2 If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece.
 - 7.6.3 To replace the respirator or the filter, cartridge elements.
- 7.7 Respirator will be repaired or replaced if the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece.

- 7.8 There is no use of supplied air respirators at CSU, East Bay.
- 7.9 All filters, cartridges, and canisters will be labeled and color coded with the NIOSH approval label. Employees will be instructed not to remove the label and to inspect the label for legibility.

8.0 MAINTENANCE AND CARE OF RESPIRATORS

- 8.1 Respirators initially are issued to the employee cleaned, sanitary, and in good working order. **See Appendix V for instructions.** Appendix V is an insert from Cal/OSHA Appendix B-2 to Section 5144, "Respirator Cleaning Procedures (Mandatory)." Respirators will be cleaned and disinfected at the following intervals:
 - 8.1.1 Respirators issued for the exclusive use of the employee will be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.
 - 8.1.2 Respirators issued to more than one employee will be cleaned and disinfected before being worn by different individuals.
 - 8.1.3 Respirators used in fit testing and training will be cleaned and disinfected after each use.
- 8.2 Respirators will be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.
- 8.3 Respirators will be packed or stored to prevent deformation of the facepiece and valves.
- 8.4 Respirators will be inspected before each use and during cleaning.
- 8.5 Respirators inspection will include the following:
 - 8.5.1 A check of respirator function, tightness of connections, and the condition of the various parts (facepiece, head straps, valves, connecting tube, cartridges or filters).
 - 8.5.2 A check of elastic parts for pliability and signs of deterioration.
- 8.6 Respirators that fail an inspection or found defective will be removed from service, and are discarded or repaired or adjusted in accordance with the following procedures:

- 8.6.1 Repairs or adjustments will be made only by persons appropriately trained and only NIOSH approved parts designed for the respirator will be used.
- 8.6.2 Repairs will be made according to manufacturer's recommendations and specifications for the type and extent of repairs to be performed.

9.0 TRAINING AND INFORMATION

- 9.1 Training will be provided annually or as often as necessary. At minimum the employee will be able to demonstrate the following:
 - 9.1.1 Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
 - 9.1.2 What the limitations and capabilities of the respirator are.
 - 9.1.3 How to use the respirator effectively, including situations in which the respirator malfunctions.
 - 9.1.4 How to inspect, put on and remove, use, and check the seals of the respirator.
 - 9.1.5 What the procedures are for maintenance and storage of the respirator.
 - 9.1.6 How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
 - 9.1.7 The general requirements of this program.
- 9.2 Training will be understandable and provided prior to the use of a respirator. If an employee has received training within the last 12 months and can demonstrate knowledge of the above elements in 9.1, then training will not be repeated for that employee. Training will be provided no later than 12 months from the date of the previous training.
- 9.3 Retraining will be provided annually and when the following situations occur:
 - 9.3.1 Changes in the job or the type of respirator.

- 9.3.2 Inadequacies in the employee's knowledge or use of the respirator.
- 9.3.3 Any other situations arises in which retraining appears necessary to ensure safe respirator use.
- 9.4 For basic information on employees who wear respirators when not required by the required Respiratory Protection standard, **See Appendix VI**. Appendix VI is an insert from Cal/OSHA Appendix D to Section 5144, "(Mandatory) Information for Employees Using Respirators When Not Required under the Standard." This information will be provided to each of the users.
- 9.5 Note: For the 3M 8500 Comfort Mask, read and follow the manufacturer instructions, especially the "Warning" label.

10. PROGRAM EVALUATION

- 10.1 Applicable departments will evaluate the jobs of respirator users and consult with the employees to ensure that this written respiratory protection program is being properly implemented at least every two (2) years. This information will be forwarded to EHS to revise this program accordingly.
- 10.2 At minimum, the following will be included in the evaluation:
 - 10.2.1 Respirator fit (including the ability to use the respirator without interfering with effective job performance.
 - 10.2.2 Appropriate respirator selection for the hazards to which the employee is exposed.
 - 10.2.3 Proper respirator use under the job conditions the employee encounters.
 - 10.2.4 Proper respirator maintenance.

11.0 RECORDKEEPING

- 11.1 Written information regarding fit testing, training, and the respirator program will be maintained by EHS. Information regarding medical evaluations will be maintained by the Student Health Center.

- 11.2 Records of medical evaluations will be maintained up to thirty (30) years after employment.
- 11.3 The records of qualitative and quantitative fit tests will include the following:
 - 11.3.1 The name or identification of the employee tested.
 - 11.3.2 Type of fit test performed.
 - 11.3.3 Specific make, model, style, and size of respirator tested.
 - 11.3.4 Date of test.
 - 11.3.5 The pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs.
- 11.4 Written information pertaining to this program will be made available upon request to affected employees or designee for examination and copying. At least one copy will be available in each user department.