# Respiratory Protection Program

Approved by the Board of Supervisors on

NOVEMBER 07, 2023

## CONTENTS

## I. INTRODUCTION

When engineering and work practice controls do not provide enough protection from workplace hazards, personal protective equipment such as respiratory protection may be necessary. However, a respirator will not provide the intended protection if it is used improperly, or if employers choose the wrong type of respirator or one that doesn't fit the individual worker.

Improper use of respirators can result in worker injury and illness and can also result in a regulatory enforcement visit. California's regulation for worker use of respirators is in Title 8 of the California Code of Regulations (T8CCR), section 5144 and its appendices. The regulation details minimum steps employers must take to ensure safe and effective use of respirators in the workplace. Section 5144 applies to all workplace respirator use. Many substance-specific standards, such as lead, asbestos, and carcinogens, also have additional respiratory protection requirements (Firefighters: also see section 3409).

This policy is intended to not only keep the County compliant with T8CCR 5144, but also to provide proper guidance on respirator use so that staff are properly protected from workplace hazards.

## II. POLICY

Department Heads shall ensure employees working under their direction at certain locations and tasks who are exposed to respiratory hazards during routine operations are identified. Supervisors are to maintain an updated Appendix A (**Voluntary and Required Respirator Use**) at all times and ensure it is posted at all locations where employees use respirators. Appendix A also identifies when emergency use of respirators may be warranted, and where voluntary use of respirators is authorized. Appendix B (**Employees Wearing Respirators**) individually identifies those employees required to use respiratory protection or allowed to wear respirators on a voluntary basis. Workers participating in the respiratory protection program do so at no cost to themselves. Supervisors must keep up to date records of Appendix A and B and submit them to Human Resources / Risk Management. These records are to be maintained for the duration of employment plus 30 years per California Code of Regulations, Title 8, section 3204 (T8 CCR 3204). Supervisors and/or delegated department safety representatives will bring Appendix A to the Safety Committee for review when requested.

When elimination is not possible, engineering controls, such as ventilation and substitution with less toxic materials, are always the best means of reducing employee airborne exposures to hazardous chemicals. Departments must demonstrate that such controls were considered for each of their operations requiring respirators and found to be not feasible or did not reduce exposures low enough before an employee's classification is entered into this program.

As required by California's Respiratory Protection regulation T8 CCR 5144, the County has developed this Respiratory Protection Program, which we implement and maintain as an important component of our Injury and Illness Prevention Program (required by T8 CCR 3203) to enhance our employees' health and safety. Department Heads have full authority and responsibility for implementing and maintaining this program. This program applies to all County workers when they are not operating under a more stringent policy or regulation, such as the Aerosol Transmissible Disease Standard (T8 CCR 5199) or when firefighters are working under a NFPA standard.

**Employees that wish to wear respirators during certain operations that do not require use of respiratory protection:** The supervisor will review each of these requests on a case-by-case basis and will provide respirators for voluntary use if the use of respiratory protection in a specific case will not jeopardize the health

or safety of the employee. Supervisors should consult with their department's health and safety representative and/or Human Resources / Risk Management before issuing a respirator for voluntary use.

Any employee who voluntarily wears a respirator (other than a disposable filtering facepiece respirator/dust mask) when a respirator is not required will be identified in Appendix B and is subject to the medical evaluation, cleaning, maintenance, and storage elements of this program, and must be provided with, and understand, the information provided in Appendix C (**Information for Employees Using Respirators When Not Required**). Employees voluntarily wearing only a filtering facepiece respirator/dust mask are not subject to these requirements, but are still required to be provided with, and understand, the information provided in Appendix C.

The instructions provided by the manufacturers of the respirators our employees use will be incorporated as part of our written program. Employee training will include references to these instructions, as appropriate. Any changes to the laws and regulations surrounding this program will automatically become part of this program and override any conflicting part.

## A. Responsibilities

### 1. Department Head (or Designated Safety Representative)

Duties of the department head include the following:

- Identify work areas, processes or tasks that require workers to wear respirators.
- Develop procedures for selecting proper respirators, including the correct filters/cartridges for air purifying respirators (APR).
- Ensure effective administration of the medical surveillance program.
- Develop procedures for proper fit testing of tight-fitting respirators.
- Develop procedures for proper use of respirators in routine and reasonably foreseeable emergency situations.
- Develop procedures and schedules for cleaning, storing, inspecting, repairing, discarding, and maintaining respirators.
- Develop procedures to ensure adequate air quantity, quality, and flow of breathing air for atmosphere-supplying respirators, including maintenance and calibration of equipment used to monitor breathing air quality.
- Ensure effective respirator user training on the respiratory hazards to which they are potentially exposed, and the proper use of respirators.
- Ensure employees voluntarily using respirators are provided with and understand the information provided in Appendix C.
- Determine suitable, objectively determined respirator cartridge change out schedules that the users must abide by.
- Determine the user seal check procedure that employees will be required to implement every time they don a respirator.
- Determine the respirator cleaning procedures that employees will be required to implement.
- Determine the respirator inspection procedures that employees will be required to implement.
- Ensure maintenance of all records required by this program.

- Develop procedures for regularly evaluating the effectiveness of this program.

### 2. Supervisors

Duties of the supervisors include ensuring:

- Employees under their supervision (including new hires) receive appropriate training, fit testing, and medical evaluations, as required.
- Availability of appropriate respirators and accessories.
- Awareness of tasks requiring the use of respiratory protection and enforcement of the proper use of respiratory protection.
- Respirators are properly cleaned, maintained, inspected, and stored.
- Respirators fit well and do not cause discomfort.
- Additional fit testing is conducted if an employee indicates a respirator does not seem to fit any more or it is found to be unacceptable.
- Continual monitoring of work areas and operations to identify respiratory hazards.
- Coordination with the department head and human resources / risk management on how to address respiratory hazards or other concerns regarding the program.
- Employees change respirator cartridges out according to the prescribed change-out schedules.
- Provision of adequate air quantity, quality, and flow of breathing air for atmosphere-supplying respirators.
- Appendices A & B are maintained and kept up to date.

### 3. Employees

Duties of employees include the following:

- Wear their respirators when and where required and in the manner in which they were trained.
- Care for and maintain their respirators as instructed, and store them in a clean, sanitary location.
- Change their respirator cartridges out according to the prescribed change-out schedules.
- Inform their supervisor if the respirator no longer fits well or is found to be unacceptable.
- Inform their supervisor, the Department Head, or Human Resources / Risk Management of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.
- Inform their supervisor of the need for a medical reevaluation.

## III. DEFINITIONS

**APF: assigned protection factor.** The level of respiratory protection that a particular type of respirator is expected to provide, assuming it's used via an effectively implemented respiratory protection program.

**APR: air purifying respirator.** Relies on filtration to remove airborne contaminants.

**Fit factor.** A quantitative estimate of the fit of a particular respirator to a specific individual. For example, a fit factor of 100 means the concentration of an airborne contaminant is expected to be 100 times less inside the respirator facepiece compared to the outside.

**IDLH:** Immediately Dangerous to Life or Health

**MUC:** maximum use concentration.

**NIOSH:** National Institute of Occupational Safety and Health

**PAPR:** powered air purifying respirator.

**PEL:** Permissible Exposure Level

**PLHCP: Physician or other licensed health care professional.** Someone that is authorized under their California license to conduct the medical evaluation of employees required to wear a respirator.

## IV. RESPIRATOR SELECTION PROCEDURES

- A hazard evaluation will be conducted for each operation, process, or work area whenever it is reasonable to suspect that employees may be exposed to concentrations of airborne contaminants in excess of Cal/OSHA permitted levels. This includes:
    - Ensuring it incorporates our Hazard Communication Program, including the identification and development of a list of hazardous chemicals used in the workplace, by department or work process, and obtaining a Safety Data Sheet for each of these chemicals.
    - Reviewing work processes to determine where potential exposures to these hazardous chemicals may occur.
    - Employee exposure monitoring and evaluation of objective information to estimate potential hazardous exposures. Outside expertise, such as our workers' compensation insurance carrier or a private consultant, will be used, as needed. This information will also be used as needed to determine APR cartridge change-out schedules.
    - Assuming IDLH (immediately dangerous to life or health) conditions when worker exposures have not been, or cannot be, evaluated.
- Respirators to be used are selected in accord with applicable Cal/OSHA standards and based on the hazards to which workers are exposed, as well as workplace and employee user factors affecting respirator performance and reliability.
- Respirators are selected based on the Assigned Protection Factors (APFs) and calculated Maximum Use Concentration (MUC). For instance, if the respirator selected has an APF of 10, it can only be used where employee exposures are less than 10 times the Cal/OSHA permitted levels.
- A sufficient number of respirator sizes and models will be provided to the employees during fit testing to identify the respirators that correctly fit, and are acceptable to, the users.
- Only National Institute of Occupational Safety and Health (NIOSH)-certified respirators are to be selected and must be used in compliance with their certification.
- For IDLH atmospheres:
    - Full facepiece pressure demand SARs with auxiliary SCBA unit or full facepiece pressure demand SCBAs, with a minimum service life of 30 minutes, must be provided.
    - Respirators used for escape only are NIOSH-certified for the atmosphere in which they will be

used.
    - Oxygen deficient atmospheres are considered IDLH.
- For Non-IDLH atmospheres, respirators are to be:
    - Selected as appropriate for the chemical nature and physical form of the contaminant and adequate to protect the health of the employee under routine and reasonably foreseeable emergency situations.
    - Respirators may be air purifying or atmosphere-supplying.
    - Equipped with end-of-service-life indicators (ESLIs) if the APR respirators are used for protection against gases and vapors. The respirator cartridge change-out schedule provided below under **V. STORAGE, CLEANING, MAINTENANCE AND FILTER CHANGE-OUT PROCEDURES AND SCHEDULES** must be implemented if there is no ESLI.
    - Equipped with filters certified by NIOSH under 30 CFR part 11 as HEPA, or other filters certified by NIOSH for particulates under 42 CFR part 84 if the APR respirators are to be used for protection against particulates.

Appendix D, **Employee Airborne Hazardous Chemical Assessments**, should be used by the departments to track their latest employee airborne chemical exposure data, and use this to determine their current respirator needs. Additional employee exposure determinations shall be made, and Appendix D updated accordingly, any time there are changes made to how materials are used or processed that could significantly change employee exposure levels.

### A. Medical Evaluation

Employees are not permitted to wear respirators (except for voluntary use of a filtering facepiece/dust mask) until a physician or other licensed healthcare professional (PLHCP) has determined that they are medically able to do so.

The medical questionnaire and examinations will be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. Though another qualified PLHCP may be used to provide the medical evaluations, the County most often uses:

Job Care, Occupational Medicine:
Adventist Health Sonora,1
9747 Greenley Rd S2, Sonora, CA 95370.
Phone (209) 536-3780.

- This evaluation will require a questionnaire. See Appendix E for an example.
- The department or PLHCP will provide a copy of this questionnaire to all employees requiring medical evaluations.
- To the extent feasible, the supervisor will assist employees who are unable to read the questionnaire. When this is not feasible, the employee will be sent directly to the PHLCP for medical evaluation.
- If provided by the department, all affected employees will also be offered a stamped and addressed envelope for mailing the questionnaire directly to the PHLCP. Employees may elect to take the questionnaire directly to the PHLCP or fill it out at the exam.

Employees will be:

- Permitted to fill out the questionnaire on company time.
- Granted follow-up medical exams as required by the Respiratory Protection standard, and/or as deemed necessary by the PLHCP.
- Granted the opportunity to speak with the PLHCP about their medical evaluation, if they so request.

The Department Head will provide the PLHCP with:

- A copy of this program and a copy of T8CCR 5144, Respiratory Protection standard.
- Each employee's assigned job title and work area, and the list of hazardous substances that they may be exposed to.
- The employee's:
    - Proposed respirator type and weight.
    - Length of time required to wear the respirator.
    - Expected physical workload (light, moderate, or heavy).
    - Potential temperature and humidity extremes.
    - Any additional protective clothing required.

If the respirator is a negative pressure respirator and the PLHCP finds a medical condition that may place the employee's health at increased risk if the respirator is used, we will provide a PAPR if the PLHCP's medical evaluation finds that the employee can use such a respirator.

After an employee has received clearance and begun to wear their respirator, additional medical evaluations will be provided if:

- The employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing.
- The PLHCP or supervisor informs the Department Head that the employee needs to be reevaluated.
- Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation.
- A change in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

**B. Fit Testing**

- All employees required to wear tight-fitting facepiece respirators must pass a fit test:
    - Prior to initial use.
    - Whenever a different respirator facepiece (size, style, make, model) is used.
    - At least annually.
- Additional fit-testing is required when the employee:
    - Reports, or the PLHCP, supervisor, or Department Head observes changes in the employee's

physical condition that could affect respirator fit, e.g., facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

- Notifies us or our PLHCP that the fit of the respirator is unacceptable and wishes to select a different respirator facepiece.

- Employee fit-testing will be conducted according to the protocols provided in T8CCR 5144, Appendix A, Fit Testing Procedures.
  - Qualitative Fit Test (QLFT) is the preferred County method due to its simplicity, making it more efficient. Acceptable test chemicals are Isoamyl Acetate; Saccharin Solution Aerosol; Bittrex Aerosol Solution; or Irritant Smoke.
    - The maximum APF of any negative pressure, tight fitting air-purifying respirator (except quarter-face and PAPRs) fit tested by QLFT will be 10. For instance, even though a full-face APR respirator has an APF of 50, the only way we can assume that APF is if we verify proper fit using a QNFT protocol.
  - Quantitative fit test (QNFT) may be done if the department head determines a higher APF is necessary. Acceptable methods are: Condensation Nuclei Counter (Portacount); Controlled Negative Pressure; Controlled Negative Pressure REDON; or Generated Aerosol Test Chamber]
    - Before QNFT is done the department should set standard for acceptable fit-factors. For instance, minimally required is a passing fit factor of 100 for half-face APRs and 500 for full-face APRs. Departments may implement higher passing fit factors, if deemed necessary.
- Employees should be fit-tested in the respirator they will be using, but if necessary, may be fit-tested to the same make, model, style, and size of respirators that they actually wear.
- Fit testing of tight-fitting facepiece PAPRs and supplied air respirators is to be conducted only in the negative pressure mode. If a department uses a PARPs, they must first describe how the PARP will be returned to NIOSH-approved configuration and submit to Human Resources / Risk Management for approval before fit-testing.

### C. Procedures for Proper Respirator Use

All filters, cartridges, and canisters must be labeled with the appropriate NIOSH certification label. The label must not be removed or defaced while it is in use.

**1. Employees are permitted to wear respirators as long as they:**

- Use them under the conditions specified by this program, and in accordance with the training they receive on the use of each particular model. The respirator must not be used in a manner for which it is not certified by NIOSH or by its manufacturer.
- Conduct user seal checks according to Appendix F each time that they don their respirator.
- Not wear tight-fitting respirators if they have facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function (see Figure 1), or any condition that interferes with the face-to-facepiece seal or valve function. This includes the use of headphones, jewelry, prescription eye ware or personal protective equipment (PPE). Equally important, the wearing of a respirator must not hinder the effectiveness of PPE that is worn, something that will be accommodated through the selection of different styles of PPE and respirators.

- Exit the area where the respirator is required:
  - To wash their faces and respirator facepieces as necessary to prevent eye or skin irritation associated with respirator use.
  - If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the facepiece.
  - To replace the respirator or the filter, cartridge, or canister elements.

**2. Supervisors must:**

- Take actions to ensure that employees implement all of the above requirements.
- Ensure that a respirator is replaced or repaired should an employee detect vapor or gas breakthrough, change in breathing resistance, or leakage of the facepiece, and before allowing them to return to the work area.
- Ensure adequate surveillance of work area conditions and degree of employee exposure or stress.
- Involve the Department Head when there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, so that continued effectiveness of the respirator can be evaluated.
- Ensure employees are properly groomed, including facial hair, and not wearing any items, such as jewelry, that would interfere with the effectiveness of the respirator.

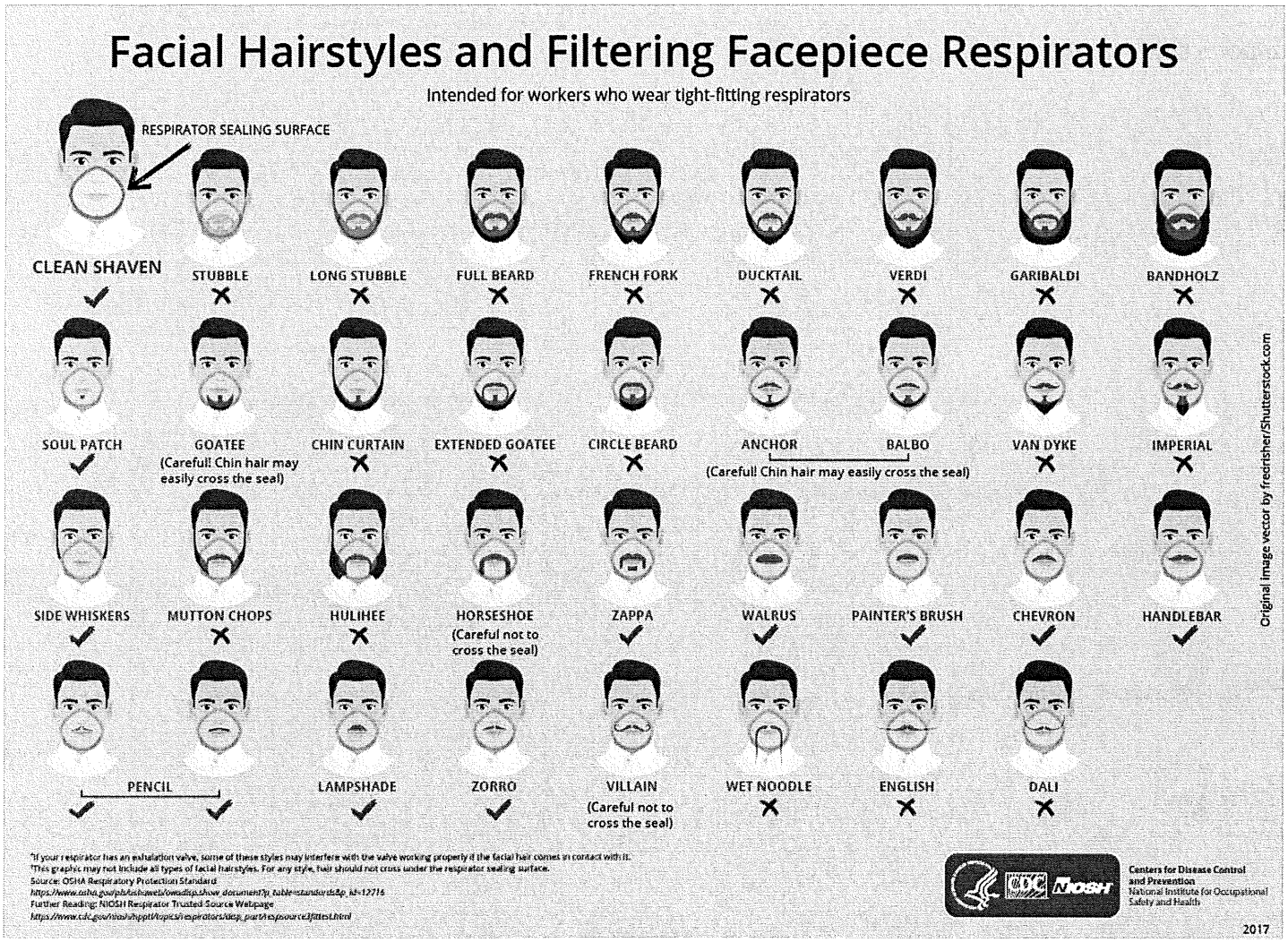


Figure 1: Facial Hair and Tight-Fitting Respirators. A green check indicates acceptable facial hair styles for most respirators while a red x indicates unacceptable facial hair. Source: https://www.cdc.gov/niosh/npptl/images/infographics/FacialHairWmaskLG.jpg

### 3. Respirator Malfunction (Non-IDLH)

For any malfunction of an APR, the respirator wearer must inform their supervisor that the respirator no longer functions and go to the designated area to maintain the respirator. The supervisor must ensure that the employee receives the needed parts to repair the respirator or is provided with a new respirator.

## V. FORESEEABLE EMERGENCY PROCEDURES

- County employees are not expected or required to enter and provide emergency response in situations that require the use of respirators. Staff should call 911 and refer to their departments Emergency Action Plan (EAP) for guidance.
- If employees work in a location where it is possible that escape may require the use of respirators, then the department must identify what emergency escape respirators will be made available, and where they are to be located. The escape route and procedures shall be part of the departments EAP and approved by Human Resources / Risk Management.
- Escape respirators must be inspected and cleaned monthly. Cartridges shall be checked monthly to ensure they are not expired.

## VI. STORAGE, CLEANING, MAINTENANCE AND FILTER/CARTRIDGE CHANGE-OUT PROCEDURES AND SCHEDULES

Note: this section does not include disposable filtering facepiece respirators, such as P95s, N95s and P100s. Filtering facepiece respirators may be reused in some situations. Check with your supervisor and Human Resources / Risk Management to see if you may reuse yours and for proper procedures on storage and handling.

### A. Cleaning

- Departments must designate an area where staff are required to regularly clean and disinfect their respirators.
- Respirators issued for the exclusive use of an employee are to be cleaned and disinfected as often as necessary to maintain sanitary conditions.
- If possible, all employees should be issued their own respirator, but should more than one employee share a respirator it will be cleaned and disinfected before and after each use.
- Respirators maintained for emergency use or used in fit-testing and training will be cleaned and disinfected before and after each use.
- The cleaning instructions in Appendix G must be implemented.

The Department Head will ensure an adequate supply of appropriate cleaning and disinfection material at the cleaning station. If supplies are low, employees should contact their supervisor or department head.

### B. Maintenance

- Respirators are to be properly maintained at all times to ensure that they function properly and adequately protect the employees.
- Maintenance involves a thorough visual inspection (Appendix H) for cleanliness and defects.
- Worn or deteriorated parts will be replaced prior to use.
- No components will be replaced or repairs made beyond those recommended by the manufacturer.
- Repairs to regulators or alarms of atmosphere supplying respirators will be conducted by the manufacturer or an authorized representative.
- Employees are encouraged to leave their work area and go to a designated area that is free of respiratory hazards when they need to wash their face and respirator facepiece (using Appendix G procedures) to prevent any eye or skin irritation, or to replace the filter, cartridge or canister, or when they detect vapor or gas breakthrough or leakage in the facepiece or detect any other damage to the respirator or its components.
- The inspection procedures in Appendix H must be implemented.
- All respirators maintained for use in emergency situations must be inspected at least monthly and in accordance with the manufacturer's recommendations and will be checked for proper function before and after each use. Emergency escape-only respirators will be inspected before being carried into the workplace for use.

### C. Cartridge Change-Out Schedules

- Employees wearing APRs for protection against airborne particulates need to change the filters on their respirators when they first begin to experience difficulty breathing (i.e., resistance) while

wearing their masks. Employees wearing PAPRs against airborne particulates must follow the manufacturer's recommendations for when to change out the filters.

- Departments should reproduce the Table below to outline the cartridge change-out schedules for each operation where employees are using respiratory protection against all airborne contaminants other than particulates. Supervisors should maintain a description of the completed table as follows:
  - How the change-out schedules were determined (e.g., the respirator manufacturer's Web-based calculator was used using the information provided in Appendix D) given:
    - The respirator model and filter type.
    - Expected employee airborne exposure levels.
    - The Cal/OSHA PELs
    - Expected ambient work conditions, including temperatures and humidity levels.
    - Expected work rate
  - How employees will be expected to keep track of cartridge use times, or if cartridges will, instead, be disposed of at the end of the shift even though the cartridges are adequate for longer than the duration of a single shift.

| Task/Location/Operation | Respirator Model and Cartridge Type | Airborne Contaminants | Change-out Schedule* (hours) |
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*Starts as soon as the cartridges are unsealed, not when the employees start to use them.

**D. Storage**

- Respirators must be stored in a clean, dry area, and in accord with the manufacturer's recommendations.
- Each employee will clean and inspect their own air purifying respirator in accord with the provisions of this program, and will store their respirator by one of the following methods:
- A clean plastic bag (or a clean rigid container should it be necessary to prevent physical damage).
- Their own locker or some other storage area, if suitably clean.
- Accord with the manufacturer's recommendations.
- Each employee will have their name on the respirator storage container, which will only be used to store that employee's respirator.
- Atmosphere-supplying respirators will be stored according to manufactures recommendations.
- The department will store a supply of respirators and respirator components in their original manufacturer's packaging.
- Should a respirator need to be shared among staff
  - It should be cleaned with warm water and detergent before and after each use.
  - If the manufacture has a recommended cleaner, then it should be used as specified.

- Disinfectant wipes should be made available for frequent cleaning.
- The storage container must be inspected with the respirator and kept clean.
- A log of cleaning should be kept and at a minimum include: date & time, staff member's name and signature, solution used.

**E. Defective Respirators**

- Respirators that are defective or have defective parts must be immediately tagged and taken out of service.
- As soon as an employee discovers a defect in a respirator, they must bring the defect to the attention of their supervisor.
- Supervisors will tag and notify the department head of all defective respirators.
- The Department Head will decide whether to:
  - Temporarily take the respirator out of service until it can be repaired.
  - Perform a simple fix on the spot such as replacing a head strap.
  - Dispose of the respirator due to an irreparable problem or defect.
- Employees will be provided with a replacement respirator that they have been fit-tested for before returning to work.

## VII. TRAINING

- The Department Head will provide training to respirator users and their supervisors on the contents of this Respiratory Protection Program, their responsibilities under it, and on the Cal/OSHA Respiratory Protection standard (T8CCR, section 5144). See Appendix I.
- Workers will be trained prior to using a respirator in the workplace.
- The training will be comprehensive, understandable and recur annually, and more often if necessary.
- Supervisors must also be similarly trained prior to supervising workers who must wear respirators even though supervisors themselves may not use a respirator. This is so they can ensure that each employee can demonstrate knowledge of at least the following:
  - Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
  - What the limitations and capabilities of the respirator are.
  - How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.
  - How to inspect, put on and remove, use, and check the seals of the respirator.
  - What the procedures are for maintenance and storage of the respirator.
  - How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
  - The general requirements of the Respiratory Protection standard.
- The Department Head and supervisors will ensure that employees are retrained at least annually or as needed, such as when the following situations occur:
  - Changes in the workplace conditions or the types of respirators render previous training obsolete.

- Inadequacies in the employee's knowledge or use of the respirator indicate that the worker has not retained the requisite understanding or skill.
- Any other situation arises in which retraining appears necessary to ensure safe respirator use.

- When a respirator is issued for voluntary use, supervisors must review the basic advisory information for the respirator at the time it is issued and again yearly.

**New employees that may have been previously trained within the past 12 months:** Re-training will not be required if the Department Head is able to demonstrate that the new employee has received the training within the last 12 months, it addressed the elements specified by our respirator program, and the employee can demonstrate knowledge of those elements. Previous training not repeated initially by us will be provided no later than 12 months from the date of the previous training.

## VIII. PROGRAM EVALUATION

- The supervisor will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented.
- The evaluations will include regular consultations of the Department Head with employees who use respirators andtheir supervisors, site inspections, air monitoring and a review of records.
- Factors to be assessed include:
  - Respirator fit (including the ability to use the respirator without interfering with effective workplace performance).
  - Appropriate respirator selection for the hazards to which the employees are exposed.
  - Proper respirator use under the workplace conditions employees encounter.
  - Proper respirator maintenance.
- Problems identified will be noted and corrected by the supervisor and reported to the department head. The report will list plans to correct deficiencies in the respirator program and target dates for implementing those corrections.
- The department head is to regularly, at least yearly, evaluate whether hazard elimination, substitution, or engineering controls are available that would eliminate or reduce the need of the respirator.

## IX. DOCUMENTATION AND RECORDKEEPING

The supervisor will ensure documents supporting our respirator program are maintained and made available to affected employees upon request as follows:

- A written copy of this respirator program.
- The Cal/OSHA standard (T8CCR, section 5144).
- Training materials used in our program.
- Fit test records. These records will include:
  - The name or identification of the employee tested.
  - Type of fit test performed.
  - Specific make, model, style, and size of respirator tested.

  - Date of test.
  - Test results (the pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs).
- Copies of all other records for all employees covered under the respirator program (except medical records).
- Records of medical evaluations will be retained and made available in accordance with T8CCR, section 3204, Access to Employee Exposure and Medical Records. The completed medical questionnaire and the PLHCP's documented findings are confidential and will remain with the PLHCP. We will only retain the physician's written recommendation regarding each employee's ability to wear a respirator

Should we use the services of a temporary employment service, we will treat their employees as if they are ours and include them in our Respiratory Protection Program, as appropriate.

Employees are to contact their supervisor if they have questions about this plan or wishes to review it. Supervisor shall ensure that the policies are carried out and the plan is effective. Should any needed changes with this plan be identified, employees and/or supervisors shall report the changes to the Department Head.

## X. ACKNOWLEDGEMENT

I certify that I have read and understand the County of Tuolumne's Respiratory Protection Program, including my responsibilities with respect to the policy and procedures outlined therein. I further agree to comply with all safe work practices. I understand that failure to follow this policy could put my own and other employees' health and safety at risk and result in discipline up to and including termination.

_____ _____

Print Name Date

_____

Employee Signature

## Appendix A

## Voluntary and Required Respirator Use

| Work Location and Task | Airborne Hazardous Materials of Concern | Required Respirator APF | Type of Respiratory Protection (e.g., half- or full-face, APR or SAR, filtering facepiece) | Indicate if "mandatory", "voluntary*", or "emergency" use |
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## Appendix B

## Employees Wearing Respirators

| Employee | Make, Model, and Size of Respirator | Indicate if "mandatory", "emergency", or "voluntary" | Date of Last Medical Clearance | Date* of Last Fit-Test |
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*Must be at least annual

## Appendix C

### Information for Employees Using Respirators When Not Required Under the T8 CCR 5144

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 Cal/OSHA standards. If a respirator is provided 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. The wearer of a respirator shall inspect it prior to donning to ensure proper working condition.

2. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.

3. 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.

4. 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.

5. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

6. Facial hair may interfere with the effectiveness.

Supervisors shall ensure employees have read and understood the above information before issuing a respirator for voluntary use.

I have received and understand the above information.

Name_____

Signature_____ Date_____

## Appendix D

## Employee Airborne Hazardous Chemical Assessments

| Work Location/Task | Number of Employees | Airborne Contaminants Evaluated and Date(s) | Date of Latest Assessment | Range of Exposure Levels Determined | Cal/OSHA (or other) permitted concentration limits |
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Department Heads shall document where the information is kept that was used to provide the above summary, how interested parties can access this information, and store this document with the above chart. Department Heads must also verify that the assessed exposure durations correspond to the permissible exposure limit (PEL) time-weighted average (TWA) 8-hour, short term exposure level (STEL) 15 minute, and Ceiling level durations.

# Appendix E
# OSHA Respiratory Medical Evaluation (Example)

MUST BE COMPLETED IF FIT TEST EXPIRED.
You will be notified by email when you are cleared to be fit tested.

AdventistHealth
Sonora

**Appendix C to Sec. 1910.134: 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 (circle one): Yes/No

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

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

1. Today's date: _____

2. Your name: _____

3. Your age (to nearest year): _____

4. Sex (circle one): Male/Female

5. Your height: _____ ft. _____ in.

6. Your weight: _____ lbs.

7. Your job title: _____ Dept.: _____

8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): _____

9. The best time to phone you at this number: _____

10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No

11. Check the type of respirator you will use (you can check more than one category):
a. _____ N, R, or P disposable respirator (filter-mask, non- cartridge type only).
b. _____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).

MUST BE COMPLETED IF FIT TEST EXPIRED.
You will be notified by email when you are cleared to be fit tested.

12. Have you worn a respirator (circle one): Yes/No

If "yes," what type(s): _____

_____

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

1. Do you **currently** smoke tobacco, or have you smoked tobacco in the last month: Yes/No

2. Have you **ever had** any of the following conditions?

a. Seizures (fits): Yes/No
b. Diabetes (sugar disease): Yes/No
c. Allergic reactions that interfere with your breathing: Yes/No
d. Claustrophobia (fear of closed-in places): Yes/No
e. Trouble smelling odors: Yes/No

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

a. Asbestosis: Yes/No
b. Asthma: Yes/No
c. Chronic bronchitis: Yes/No
d. Emphysema: Yes/No
e. Pneumonia: Yes/No
f. Tuberculosis: Yes/No
g. Silicosis: Yes/No
h. Pneumothorax (collapsed lung): Yes/No
i. Lung cancer: Yes/No
j. Broken ribs: Yes/No
k. Any chest injuries or surgeries: Yes/No
l. Any other lung problem that you've been told about: Yes/No

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

a. Shortness of breath: Yes/No
b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
d. Have to stop for breath when walking at your own pace on level ground: Yes/No
e. Shortness of breath when washing or dressing yourself: Yes/No
f. Shortness of breath that interferes with your job: Yes/No
g. Coughing that produces phlegm (thick sputum): Yes/No
h. Coughing that wakes you early in the morning: Yes/No
i. Coughing that occurs mostly when you are lying down: Yes/No
j. Coughing up blood in the last month: Yes/No
k. Wheezing: Yes/No
l. Wheezing that interferes with your job: Yes/No
m. Chest pain when you breathe deeply: Yes/No
n. Any other symptoms that you think may be related to lung problems: Yes/No

MUST BE COMPLETED IF FIT TEST EXPIRED.
You will be notified by email when you are cleared to be fit tested.

5. Have you **ever had** any of the following cardiovascular or heart problems?

a. Heart attack: Yes/No
b. Stroke: Yes/No
c. Angina: Yes/No
d. Heart failure: Yes/No
e. Swelling in your legs or feet (not caused by walking): Yes/No
f. Heart arrhythmia (heart beating irregularly): Yes/No
g. High blood pressure: Yes/No
h. Any other heart problem that you've been told about: Yes/No

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

a. Frequent pain or tightness in your chest: Yes/No
b. Pain or tightness in your chest during physical activity: Yes/No
c. Pain or tightness in your chest that interferes with your job: Yes/No
d. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No
e. Heartburn or indigestion that is not related to eating: Yes/ No
f. Any other symptoms that you think may be related to heart or circulation problems: Yes/No

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

a. Breathing or lung problems: Yes/No
b. Heart trouble: Yes/No
c. Blood pressure: Yes/No
d. Seizures (fits): Yes/No

8. If you've used a respirator, have you **ever had** any of the following problems? (If you've never used a respirator, check the following space and go to question 9:)

a. Eye irritation: Yes/No
b. Skin allergies or rashes: Yes/No
c. Anxiety: Yes/No
d. General weakness or fatigue: Yes/No
e. 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

Employee Signature: _____ Date: _____

Employee may/may not wear or use a respirator.

Practitioner Signature _____ Date: _____

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## Appendix F

## User Seal Check Procedures

Facepiece Positive and/or Negative Pressure Checks.

***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.

***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.

Note: Manufacturers may provide instructions that are specific for their respirator. Supervisors should ensure staff follow the manufacturer's instructions if it can be demonstrated that those instructions are more effective than those above.

## Appendix G

## Respirator Cleaning Procedures

Employees must implement the following respirator cleaning procedures:

- 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.
- 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. Employees will be provided with detergents, cleaners, and brushes.
- Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.
- 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).
    - 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).
    - Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
- 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.
- Components should be hand-dried with a clean lint-free cloth or air-dried.
- Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.
- Test the respirator to ensure that all components work properly.

Note: Manufacturers may provide instructions that are specific for their respirator. Supervisors should ensure staff follow the manufacturer's instructions if it can be demonstrated that those instructions are more effective than those above.

## Appendix H

## Respirator Inspection Procedures

Employees will use the following checklist when inspecting respirators before each use and during cleaning:

- Facepiece
  - Pliability
  - Cracks, tears, or holes
  - Face mask distortion
  - Cracked or loose lenses/face shield
  - Contamination of the interior
- Valves:
  - Residue or dirt
  - Cracks or tears in valve material
  - Valve distortions and proper seating
- Head straps:
  - Breaks or tears
  - Loss of elasticity
  - Functional buckles
- Filters/Cartridges:
  - Approval designation label
  - Gaskets
  - Cracks or dents in housing
  - Proper cartridge for the hazard
- Air Supply Systems:
  - Breathing air quality/grade
  - Compressed air cylinder documentation
  - Compressor air source and quality control measures verified
  - Condition of supply hoses
  - Hose connections in good condition and incompatible with non-breathing air systems
  - Settings on regulators and valves are set as required. The air source has sufficient capacity and is providing sufficient P.S.I. given the length of airline hoses used and the number of users. Supervisors shall ensure staff know the manufacture's recommendations for their respirator for the minimal operating parameters that will ensure the minimum CFM (cubic feet per minute) of air is being provided.

All respirators maintained for use in emergency situations must be inspected at least monthly and in accordance with the manufacturer's recommendations and will be checked for proper function before and after each use. Emergency escape-only respirators will be inspected before being carried into the workplace for use.

Note: Manufacturers may provide instructions that are specific for their respirator. Supervisors should ensure staff follow the manufacturer's instructions if it can be demonstrated that those instructions are more effective than those above.

## Appendix I

**Employee Respirator Training Roster**

Content of the training will be as outlined in our written Respiratory Protection Program and as outlined in the Training Topic Checklist.

Date: Department:

Name and title of person conducting the training:

☐ Initial training (reference attached training topic checklist)

☐ Repeat training

| Employee Name | Signature |
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**Training Topic Checklist**

- Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
- What the limitations and capabilities of the respirator are.
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions.
- How to inspect, put on and remove, use, and check the seals of the respirator.
- What the procedures are for maintenance and storage of the respirator.
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
- The general requirements of the Respiratory Protection standard (T8CCR 5144).
    - The employer shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.
    - The employer shall select a NIOSH-certified respirator. The respirator shall be used in compliance with the conditions of its certification.
    - The employer shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be IDLH.
- Any worksite specific information necessary for the proper use of a respirator.

## BOS APPROVAL

The County of Tuolumne's Respiratory Protection Program was approved by the Board of Supervisors and became effective on NOVEMBER 07, 2023.

APPROVED AS TO LEGAL FORM:

Sarah Carrillo, County Counsel

APPROVED:

Kathleen K. Haff, CHAIR

ATTEST:

Heather D. Ryan,
Board Clerk of the Board of Supervisors

I hereby certify that according to the provisions of Government Code Section 25103, delivery of this document has been made.

HEATHER D. RYAN
Board Clerk

By: _____