

San Mateo County
Department of Public Works
RESPIRATORY PROTECTION PROGRAM

Updated January 2009



TABLE OF CONTENTS

- A. RESPONSIBILITIES
 - Safety Manager
 - Risk Management
 - Supervisors
 - Employees
 - Occupational Health Physician

- B. STEPS INVOLVED IN OBTAINING A RESPIRATOR
 - Requesting a Respirator
 - Scheduling the Medical Exam

- C. RESPIRATOR TRAINING
 - Training Content**

- D. FIT TESTING

- E. PROGRAM EVALUATION

- F. UPDATES TO THE PROGRAM

APPENDIX A: Instructions on the Care and Use of Half-Face Negative Pressure Respirators

APPENDIX B: Frequently Asked Questions

APPENDIX C: Public Works Positions Covered Under this Program

INTRODUCTION

The County of San Mateo makes all reasonable efforts to protect the health and safety of all of its employees. This commitment extends to controlling potential respiratory hazards due to airborne contaminants encountered in the working environment.

The most effective way to control air contaminants is for work practices to be devised, which eliminate or minimize occupational exposure. This is achieved by first implementing administrative controls and when there still remain airborne contaminants we institute appropriate engineering controls.

Public Works has developed this Respiratory Protection Program (RPP) to establish uniform policies and procedures concerning the use of respirators. This document is designed to meet the General Industry regulatory requirements as listed in Title 8, California Code of Regulations, Section 5144 (8 CCR, 5144) mandating a written respiratory protection program. This document will serve to assist employees, supervisors, and managers in understanding their roles and responsibilities with regard to the Respiratory Protection Program.

A. RESPONSIBILITIES

Public Works Safety Manager

The Safety Manager is responsible for overall administration of this program within the Department of Public Works. Her/his responsibilities include the following:

- Maintenance of the written program to ensure compliance with Cal-OSHA regulations;
- Evaluation of the employee exposure to hazards, whether respiratory protection is needed, and (if so) what type;
- Monitoring the supervisor's local enforcement of the program;
- Overseeing the respirator training, respirator selection, and respirator fit testing;
- Maintaining the fit testing/training records of employees;
- Scheduling training, and fit testing appointments ensuring that these items remain current;

Risk Management

The Risk Management Division of the Human Resources Department is responsible for overall administration of this program Countywide. An industrial hygienist is available by contract to assist in determining if there are other options by which to protect the employee against the suspected airborne contaminant. Other options may include:

- Eliminating the hazard;
- Replacing the product with, or refining the process to, a less hazardous one;
- Shifting the operation to a well ventilated or enclosed area;
- Installing or revising a ventilation system;
- Changing work practice(s) to reduce exposure;

Supervisor:

Supervisors are responsible for administering the program in their work area. This involves the following:

- Receiving and forwarding employee concerns about potential risks to the appropriate managerial personnel, the Public Works Safety Manager, or a Safety Committee Representative.
- Reporting employee problems related to respirator use to the Safety Manager
- Ordering or designating someone to order respirators and replacement parts for their staff members;
- Ensuring that the staff uses, inspects, maintains, and stores their respirators properly.

Employees:

The employee has a responsibility to follow the requirements of the written Respiratory Protection Program. This involves:

- Informing her/his supervisor of any personal health problems that could interfere with the use of the equipment;
- Using the respirator as instructed, and only for the designated contaminants and procedures;
- Leaving the area immediately if she/he believes the respirator is malfunctioning or not providing adequate protection and reporting any observed or suspected respirator malfunctions to her/his supervisor;
- Checking the respirator before each use to ensure that it is free of damage or alteration;
- Storing her/his respirator in a sealed bag or container in a clean, sanitary, and convenient location.

Occupational Health Physician:

The occupational health physician is responsible for:

- Conducting the employee's medical examination;
- Advising Risk Management in writing of the employee's ability to wear a respirator;
- Informing Risk Management of any abnormalities or trends noted during the physical examination.

B. OBTAINING A RESPIRATOR

Before an employee can use a respirator, employees are required to be medically cleared to wear a respirator. Employees then receive respiratory protection training, and be fit tested with the appropriate respirator(s).

Scheduling the Medical Exam:

US HealthWorks will perform the medical evaluations necessary to determine if the employee is fit to wear a respirator. To schedule an appointment, contact Maria Martinez at 474-4710. Employees must be trained prior to using a respirator.

C. TRAINING

As part of the employee's training, she/he will attend respiratory protection training, read the Departments' Respiratory Protection Program, and receive overall instruction about the components of the program.

Training Content

Training will be given annually. At the end of the training, the employees will know:

- Reasons why a respirator is worn in contaminated environments;
- Types of respirators used for particular hazards;
- Limitations and capabilities of each respirator;
- The purpose of a medical examination;
- Conditions that prevent a good face seal;
- The necessity of wearing the respirator as instructed, without modification;
- Reasons why respirators are not to be shared;
- Ways to recognize when to change disposable respirators;
- Sanitary care of respirators;
- Proper ways to inspect a respirator.

Respirator Maintenance:

Respirators must be inspected prior to each use to ensure proper function. If there are deficiencies, the worn or missing parts must be replaced. Respirators must be stored in a clean, sanitary, convenient location in a re-sealable bag or container.

D. FIT TESTING

Supervisors will have a selection of respirators which have been approved by the National Institute for Occupational Safety and Health (NIOSH) and the Mine Safety and Health Administration (MSHA), available. Note that employees may not supply their own respirators. When the employee finds a respirator that is comfortable, she/he will be required to adjust the nosepiece to fit their face.

A qualified trainer will then administer the qualitative fit testing regimen, (using a suitable challenge agent), or a quantitative fit-test, to verify that the respirator properly fits the individual.

Note: The respirator is assigned for the employee's individual use. By the end of the fit testing session, the employee will know:

- How to inspect the respirator;
- How to don and adjust the respirator;
- How to clean and store the respirator;
- When to return for training, fit testing.

E. PROGRAM EVALUATION

The Safety Manager will periodically perform work area evaluations to ensure that supervisors properly enforce the Respiratory Protection Program. During the evaluation, the Safety Manager will review and may recommend modifications regarding respirator usage, maintenance, or storage techniques. Supervisors are expected to perform periodic evaluations of their work area as well.

F. UPDATES TO THE PROGRAM

Changes in the County's and the department's Respiratory Protection Program will be implemented by an industrial hygienist as required by new federal or state regulations.

1. Inspecting the Respirator:

After assembling the respirator per the manufacturer's instructions, inspect the respirator paying special attention to the following:

- That the face piece is not cracked, distorted, or dirty;
- That the head (upper) and chin (lower) straps are intact and have good elasticity.

2. Donning the Respirator:

Place the face piece over the nose and mouth and then place the head and chin straps on the crown of the head and at the back of neck, respectively.

3. Checking the Fit of the Respirator:

After the respirator is comfortably sitting on your face, conduct the negative and positive fit check to ensure that you have a proper fit.

Negative Pressure Fit Check:

Cover the inlet opening with the palms of the hands or cover provided by the manufacturer; inhale gently so that the face piece collapses and hold your breath for ten seconds. If the face piece remains in its collapsed position and no inward air leakage is detected around the face piece-to-face seal, then the negative pressure fit checks is considered successful.

Positive Pressure Fit Check:

Cover the exhalation valve with the palm of your hand and gently exhale into the face piece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the face piece without any evidence of outward air leakage around the face piece-to-face seal. If either the positive or negative fit tests checks fail, adjust the straps and/or re-inspect the respirator to verify that all of the parts are in place.

4. Storage:

- Place the respirator in a clean re-sealable bag or container that bears your name and the date of this inspection.
- Store in a clean area protected from sunlight, heat, dust, extreme cold, excessive moisture, or damaging chemicals.

CAUTIONS: Do NOT enter into any atmosphere with these masks unless you know:

- That the amount of oxygen is sufficient to support life (that is, at least 19.5% by volume at sea level);
- That the environment is not Immediately Dangerous to Life and Health (IDLH);
- That the respirator is the proper type for the contaminant present;
- That the mask does not leak.

FREQUENTLY ASKED QUESTIONS

APPENDIX B

- 1) Who pays for the medical exam?

Your department is responsible for paying for the cost of the medical exam.

- 2) Can I get my own doctor to clear me for a respirator?

No, the County of San Mateo has selected Workforce Medical Group to provide the procedures necessary to determine your fitness to wear a respirator.

- 3) Is the medical exam confidential?

Yes, the exam information is confidential. The only item that the industrial hygienist or your supervisor receives is the medical clearance form, which indicates types of exams that were conducted and if you are suited to wear a respirator.

- 4) Can I use my respirator from home?

No. Regulations require that only your employer supply your respirator for use at work.

- 5) How often should I change my respirator?

Unless otherwise instructed at the time of training, you should change your disposable respirator when breathing becomes difficult, or other respiratory distress occurs; or, if you can taste or smell the contaminant you are working around.

- 6) Can I let my co-worker borrow my respirator just for today?

No, you have undergone medical surveillance to verify that you are fit to wear a respirator and have been fit tested to determine which respirator best fits your face. Your co-worker may not be physically able to wear a respirator and your respirator may not fit her/his face.

- 7) I'm out of cartridges for my Brand X respirator. My co-worker has many cartridges for his brand Y respirator. Can I use some of his cartridges with my respirator?

No, using parts from a different brand of respirator will void the protection, which your respirator provides you. Only use the parts designated by the manufacturer.

- 8) How often do I need a medical clearance, retraining, and fit testing?

The industrial hygienist specifies this at the time of the initial fitting, but generally, the fit testing will be annually.

JobTitle	JobClass	OCC Health Code	Number of Employees
AIRPORT OPERATIONS SPECIALIST I Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class II & III)	M003	ABER	5
AIRPORT OPERATIONS SPECIALIST II Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class II & III)	M002	ABER	1
AIRPORT OPERATIONS SUPERVISOR-E Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class II & III)	M001	ABER	1
BOILER WATCH ENGINEER Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class II & III)	T048	AERX	6
CARPENTER/MILL CABINET WORKER Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class II & III)	T030	ABERX	12
ELECTRICIAN Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class II & III)	T024	AERX	8
PAINTER Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class II & III)	T026	BERT	3
PLUMBER Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class II & III)	T020	ABER	1
ROAD CONSTRUCTION SUPERVISOR – Sewer Crew Only Application of LAVA chemical, high amounts of dust over PEL	T083	ABER	1
ROAD MAINTENANCE WORKER I – Sewer Crew Only Application of LAVA chemical, high amounts of dust over PEL	T090	ABEZR	3
ROAD MAINTENANCE WORKER II -- Sewer Crew Only Application of LAVA chemical, high amounts of dust over PEL	T085	ABEZR	3
SENIOR UTILITY WORKER	T062	ABERZ	2

JobTitle	JobClass	OCC Health Code	Number of Employees
Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class III)			
STATIONARY ENGINEER II Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class III)	T040	ABERX	27
SUPERVISING STATIONARY ENGINEER-E Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class III)	T012	ABERX	3
UTILITY WORKER II Application of chemicals which require respiratory protection & exposure to asbestos containing materials (Class III)	T063	ABERX	7