



The City of Carson

RESPIRATORY PROTECTION PROGRAM PLAN



Updated January 6, 1997

I. INTRODUCTION

As required by California Code of Regulations, Title 8, Section 5144, entitled "Respiratory Protection," the city of Carson has developed this Respiratory Protection Program Plan. This Plan sets the procedures for city employee respirator usage so that when respirators are needed to protect employees' health, they are used correctly and in compliance with applicable Cal-OSHA regulations.

II. SCOPE AND RESPONSIBILITY

- A. This Respiratory Protection Program applies to all city of Carson employees who wear respirators. Generally, employees are required to use respirators for one of four reasons:
1. The employee works in an area or at a specific operation where air contaminants are known or believed to exceed Permissible Exposure Limits (PEL) as set in Section 5155, Airborne Contaminants and controls to reduce exposure, such as ventilation, are not practical.
 2. The employee needs temporary respiratory protection prior to the installation of controls to reduce contaminant levels below PEL concentrations.
 3. The employee needs to be capable of using a respirator for the purpose of being prepared for emergencies.
 4. The employee has chosen to wear a respirator, although levels of contaminants measured are below the PELs.

A list of operations that require the use of respirators and those for which respirators are recommended is contained in Appendix I.

Exception: When a paper disposable mask-type respirator is worn in environments that contain levels of contaminants that are below the PEL, or for which no PEL exists, then the employee need not be included in the Respiratory Protection Program. See Appendix II for details.

- B. The city of Carson Safety Program Manager is responsible to assure that the requirements of this plan are followed. Currently, the Safety and Emergency Services Supervisor fulfills the role of Safety Program Manager.
- C. Technical support, fit testing, and training is provided by the Parkway Public Works Maintenance Supervisor, in the Facilities and maintenance Department.

III. GENERAL REQUIREMENTS

- A. When a city of Carson work area or specific operation is believed to have air contaminant levels near or greater than PEL concentrations, the Safety Program Manager shall arrange for monitoring to be conducted by a competent industrial hygiene to determine the contaminant concentrations.
 - 1. Work areas or operations that cause employee complaints or symptoms of overexposure should be monitored as soon as possible.
- B. When a work area or operation is found to be in excess of PELs, then the area shall be monitored:
 - 1. Every three years; or,
 - 2. Whenever equipment, chemicals, and/or production levels change to the extent they may impact exposure levels.
- C. Respiratory protection will only be permanently required to be worn for a work area or operation when exposure levels cannot be reasonably reduced below permissible concentrations utilizing engineering controls (such as mechanical exhaust ventilation) or administrative controls (such as by limiting exposure time through personnel rotation).
- D. When possible, work areas requiring respirators to be worn shall have appropriate warning signage posted.
 - 1. The signage may be specific in nature to the extent that a particular operation requires the use of a respirator, for example: "Operator Required to Wear Respirator During Spray Booth Usage."
 - 2. The signage will be in the language(s) understood by all employees working in the immediate area.
 - 3. The signage shall indicate what type of respirator is required for the area/operation.
- E. Where respirators are required to be worn, employees are responsible for wearing the assigned respirators correctly.
- F. Supervisors are responsible for assuring that employees correctly wear respirators when required and that they are maintained in proper condition. When employees do not comply with these requirements, supervisors shall pursue disciplinary action as outlined in the City Rules, Regulations and Memorandum of Understanding for Progressive Disciplinary Action.
 - 1. When respirators are required to be in actual use, the department supervisor shall periodically audit the work area/operation to assure that:
 - a. Respirators are actually in use.

- b. The proper respirator is in use, as specified in Appendix I of this plan, or as directed by the Safety Program Manager.
- c. The respirators are being used properly, including as required by this plan and by Cal-OSHA regulations, section 5144.
- d. Employees are not being subjected to excessive physical stress due to the use of respirators.

IV. RESPIRATOR SELECTION

- A. Respirators shall be selected based on the nature and level of the air contaminants encountered in the work area or operation.
 - 1. The evaluation and selection of respiratory protection shall be made by a competent person, such as an industrial hygienist. Generally, respirator selection shall be made according to National Institute of Occupational Safety and Health (NIOSH) "Respirator Decision Logic" guidelines.
- B. Only respirators, and when used, their cartridges, that have been approved for their intended application by the federal Mine Safety and Health Administration (MSHA) or NIOSH may be used.
 - 1. Air for air-supplied respirators shall meet the requirements of CCR Title 8, Section 5144.
- C. Respirators, respirator parts, and respirator cleaning supplied shall be provided by the city of Carson free of charge to those employees who are required to wear respirators.
 - 1. A sufficient supply of respirator parts (such as cartridges, filters, valves or where disposable respirators are used, new respirators) and respirator cleaning supplies shall be kept on hand so that respirators may be properly maintained.
 - 2. Only those respirators supplied by the city may be used on the job.

V. RESPIRATOR USAGE REQUIREMENTS

- A. Prior to assignment to tasks requiring the use of respirators, employees shall be medically evaluated for their physical ability to wear a respirator.
 - 1. The evaluation shall be conducted by a physician. Evaluations typically include spirometry and a chest x-ray.
 - 2. The physician performing the evaluation shall provide documentation to the city whether or not the employee is medically fit to wear a respirator.
 - 3. The medical evaluation shall be repeated yearly for those employees who continue to be assigned to jobs that require the use of respirators.

4. Medical evaluations for respiratory protection and the time to complete them will be paid for by the city.
- B. Only employees that are medically qualified and have received training and fit testing as described in Section VI of this Plan may be assigned to tasks requiring respirators.
1. When an employee's facial shape has changed significantly, the employee shall be re-fit tested by a competent person as soon as possible. Facial shape may change due to significant weight loss or gain (25 pounds or more), injury, orthodontics, or cosmetic to other type of facial surgery.
- C. Respirators shall not be worn by employees with conditions that prevent a proper face seal. These conditions may include, but are not limited to:
1. Skull hats;
 2. Eyeglasses;
 3. Missing dentures; or,
 4. Facial hair, such as long sideburns and beards.
 - a. Male employees must be reasonably clean shaven when wearing respirators. Excessive beard stubble can prevent a proper facial seal.
- D. When full-face piece respirators are worn, the city will obtain special glasses for sight impaired employees which may be safely worn under the respirator face piece.
- E. The wearing of contact lenses in atmospheres requiring respirators is prohibited.
- F. When not in use, respirators shall be stored to protect them from dust, sunlight, temperature extremes, chemical contamination, excessive moisture, or crushing.
1. Respirators shall be stored in containers so that the respirator and its parts do not become deformed from crushing.
 2. Respirators shall not be stored in tool boxes or lockers unless they are stored in carrying cases or their boxes.
 3. Routinely used respirators may be stored in clean plastic bags
 4. Respirators used for emergency purposes shall be quickly accessible at all times and shall be stored in clearly marked containers designed for the intended purpose.
- G. Respirators shall be cleaned and disinfected as frequently as necessary to insure that proper protection and sanitation is maintained for the wearer. The manufacturer's recommendations for cleaning and sanitizing respirators shall be followed.
1. Employees are responsible for cleaning and disinfecting respirators assigned to them.
 2. Respirators that are shared by multiple users shall be cleaned and disinfected by the last user after each use.

3. Respirators that are used for emergency purposes shall be cleaned and disinfected after each use.
- H. All respirators shall be inspected by the user prior to and after each use. Worn, damaged or missing respirator parts shall be replaced prior to use or a new respirator shall be obtained.
1. Respirators that are reserved for emergency use shall be inspected after each use and at least monthly by the Public Works Maintenance Supervisor, Parkway Division. These inspections shall be documented.
 2. Repairs of respirators shall be made by qualified individuals only.
 3. No adjustments beyond those recommended by the manufacturer shall be made to respirators. Alterations to respirators are not permitted, as they void the NIOSH/MSHA approval.
- I. The respirator wearer shall conduct a face piece fit test according to the respirator manufacturer's instructions each time the respirator is donned. Typically, this includes positive and negative pressure checks.

VI. TRAINING

- A. Training classes for respirator wearers and their supervisors shall be provided by the city of Carson. These classes shall include those individuals that may be required to wear respirators in an emergency situation.
1. The training shall be conducted by a competent person, such as an industrial hygienist.
 2. Covered employees shall attend training annually
 3. Documentation of the training shall be maintained using the city's Receipt of Training form, "Travel/Training Record" (form 6054/0489; See Appendix II for details).
 4. The training shall include, at a minimum, the following topics:
 - a. Why respirators are necessary;
 - b. Limitations of respirators;
 - c. Respirator inspection procedure;
 - d. Respirator donning procedure;
 - e. The respirator manufacturer's fit test procedure;
 - f. Respirator fitting by the instructor;
 - g. A change to allow the employee to wear the respirator in a test atmosphere;
 - h. Respirator cleaning and disinfecting procedures; and,

- i. Respirator storage procedure.

VII. RESPIRATORY PROTECTION REVIEW

- A. At least every six months, the Safety Program Manager or his/her designee shall evaluate:
 - 1. That respirators are being used properly;
 - 2. That respirators are being maintained properly;
 - 3. That this Respiratory Protection Program is maintaining its effectiveness; and,
 - 4. That this plan is in compliance with current Cal-OSHA requirements.
- B. The results of the evaluation outlined above shall be documented.
- C. The Safety Program Manager shall amend this Respiratory Protection Program Plan or have refresher training conducted as necessary should the evaluation reveal deficiencies in the Plan or employee compliance with respirator requirements.

VIII. RECORD KEEPING

- A. The city of Carson shall keep copies of employee medical evaluations, training documentation, and other related documentation.
 - 1. The documentation must be maintained for 30 years.
- B. The city of Carson shall provide upon request, copies of all related documentation and materials to affected employees, former affected employees, affected employees' designated representatives, and the authorized representatives of the Cal-OSHL and NIOSH.

APPENDIX I

CITY OF CARSON

Work Locations/Operations Utilizing Respirators

Operation	Hazard	Required or Optional	Respirator Type	City Approved Brand/Model
Pesticide Application	Pesticide Mist, Vapor Inhalation	Required	Half Mask, Organic Cartridge with Mist Pre-filter	3M MN6100 or 6200 or 6300 Resp. & MN 6001 Cartridge and MN 5010 Pre-filter
Sand/Water Blasting	Silica Dust	Required	To Be Determined	To Be Determined
Street Marking Painting	Organic Vapors, Paint Mist	Required	Half Mask, with Paint Filter	3M MN6100 or 6200 or 6300 Resp. & MN 6001 Cartridge and MN 5010 Pre-filter
Baseball Diamond Raking	Brick Clay Dust	Optional	Disposable Paper Dust/Mist	3M MN8710
Spray Painting (Can Application)	Organic Vapors, Paint Mist	Optional	Disposable Paper Dust/Mist	3M MN8710