

99-03: Detailed Respiratory Protection Requirements



# **Pacific Maritime Association**

Accident Prevention Department
550 California Street, P. O. Box 7861
San Francisco, California 94120-7861

# **SAFETY BULLETIN 99-3**

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**Detailed Respiratory Protection Requirements** 

## INFORMATION

Federal Respiratory Protection Rules were published on January 8<sup>th</sup> 1998. California issued detailed state respiratory protection requirements using the Federal model. Washington is in the process of implementing the Federal Rules. The purpose of this Safety Bulletin is to outline the requirements in these regulations for PMA members.

This document discusses the major requirements of OSHA's Respiratory Protection Standard. No attempt has been made to discuss every detail of the standard. Readers are encouraged to consult the regulations at 29 CFR 1910.134 for the complete text.

# Respiratory protection program information:

• The new OSHA Respiratory Protection standard replaces the standards adopted by OSHA in 1971 (29 CFR 1910.134 and 29 CFR 1926.103). These rules apply to General Industry (Part 1910), Shipyards (Part 1915), Marine Terminals (Part 1917), Longshoring (Part 1918), and Construction (Part 1926).

# (a) Permissible Practice/Engineering Evaluation

- The rules establish a hierarchy of controls by requiring the use of respirators when "effective engineering controls <u>are not feasible</u>, or while they are being instituted."
- The rules require employers to provide employees with respirators that are "applicable and suitable" for the purpose intended "when such equipment is necessary to protect the health of the employee."

• The limits for occupational exposure are found in tables in 29 CFR 1910 Subpart Z, Toxic and Hazardous Substances.

# (b) Respiratory Protection Program

- All employers utilizing respirators must develop a site specific Respiratory Protection Program
- A qualified (by training or experience) program administrator must be designated to oversee the program.
- Respirators, training, and medical evaluations must be provided at no cost to the employee.
- The written respiratory protection program must contain worksite specific procedures. It must be updated as necessary to reflect those changes in workplace conditions that affect respirator use. Procedures must include:
  - Selection of Respirators
  - Medical evaluations
  - o Fit testing procedures
  - Proper use in routine and foreseeable emergency situations
  - o Procedures and schedules for cleaning and disinfecting respirators
  - Training of employees in the hazards to which they are potentially exposed during routine and emergency situations.
  - Training employees in the proper use of respirators
  - o Procedures for regularly evaluating the plan

If voluntary use of respirators is permitted:

- Employees must be given the information in Appendix D
- The employer must establish and implement the portions of the plan to ensure the person is medically able to use the respirator, and that the respirator is cleaned and stored and maintained so that it is not a health hazard to the user.

#### (c) Selection of Respirators

- Respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and must be <u>used in compliance with the conditions of its certification</u>.
- The employer must identify and evaluate the respiratory hazards in the workplace, including a reasonable estimate of
  employee exposures and identification of the contaminant's chemical state and physical form. If the evaluation is not done
  or for some reason an evaluation cannot be made, the rules require that the atmosphere be treated as Immediately
  Dangerous to Life and Health (IDLH)
- Respirators for non-IDLH atmospheres (This assumes that employers have done the evaluation and found an non IDLH atmosphere):
  - For protection against particulates, the employer shall provide:
    - An atmosphere-supplying respirator; or
    - An air-purifying respirator equipped with high efficiency particulate air (HEPA) filters certified by NIOSH under 30 CFR Part 11 or with filters certified for particulates under 42 CFR Part 84; or
    - An air-purifying respirator equipped with any filter certified for particulates by NIOSH for contaminants consisting primarily of particles with mass median aerodynamic diameters of at least 2 micrometers.
      - Either of these types could be a powered air purifying respirator (PAPR)
    - The rules contain other similar requirements for non IDLH gas and vapor atmospheres.

## (d) Medical Evaluation

- A medical evaluation to determine employee's ability to use a respirator must be performed <u>before fit testing and use</u>.
- A physician or other licensed health care professional (PLHCP) must perform medical evaluations using a medical
  questionnaire or an initial medical examination that obtains the same information as the medical questionnaire
  (information required is contained in mandatory Appendix C).
- Employers must obtain a written recommendation regarding the employee's ability to use the respirator from the PLHCP.
- Additional medical evaluations are required under certain circumstances, e.g.:
  - Employee reports medical signs or symptoms related to ability to use respirator;
  - PLHCP, program administrator, or supervisor recommends reevaluation;
  - Information from the respirator program, including observations made during fit testing and program evaluation, indicates a need; or
  - o Changes occur in workplace conditions that may substantially increase the physiological burden on an employee.

#### (e) Fit Testing

- All employees using a <u>negative or positive pressure</u> <u>tight-fitting</u> facepiece respirator must pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT).
  - Qualitative fit test (QLFT) means a pass fail test to assess the adequacy of respirator fit that relies on the individual's response to a test agent.
  - Quantitative fit test (QNFT) means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

- Fit testing is required prior to initial use, whenever a different respirator facepiece is used, and <u>at least annually thereafter</u>.
   An additional fit test is required whenever the employee reports, or the employer or PLHCP makes visual observations of, 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).
- The fit test shall be administered using an OSHA-accepted QLFT or QNFT protocol, as contained in mandatory Appendix

# **Use of Respirators**

- Tight-fitting respirators shall not be worn by employees who have facial hair or any condition that interferes with the face-to-facepiece seal or valve function.
- Personal protective equipment shall be worn in such a manner that does not interfere with the seal of the facepiece to the face of the user.
- Employees shall perform a user seal check each time they put on a tight-fitting respirator using the procedures in mandatory Appendix B-1 or equally effective manufacturer's procedures.

# (g) Maintenance and Care of Respirators

Employers must clean and disinfect respirators using the procedures in Appendix B-2, or equally effective manufacturer's procedures at the following intervals:

- As often as necessary to maintain a sanitary condition for exclusive-use respirators,
- · Before being worn by different individuals when issued to more than one employee, and
- After each use for emergency use respirators and those used in fit testing and training.

# (h) Training and Information

- Employers must provide effective training to respirator users, including:
  - Why the respirator is necessary and how improper fit, use, or maintenance can compromise the protective effect of the respirator
  - Limitations and capabilities of the respirator
  - Use in emergency situations
  - o How to inspect, put on and remove, use and check the seals
  - o Procedures for maintenance and storage
  - Recognition of medical signs and symptoms that may limit or prevent effective use
  - General requirements of the standard
- Training is required prior to initial use, unless acceptable training has been provided by another employer within the past 12 months.
- Retraining is required annually and when:
  - Workplace conditions change,
  - New types of respirator are used, or
  - Inadequacies in the employee's knowledge or use indicates need.
- The basic advisory information in Appendix D shall be provided to employees who wear respirators when their use is not required.
  - The voluntary use of a nuisance dust mask in an unregulated area does not otherwise trigger the requirements for a respiratory protection program.

#### (i) Program Evaluation

The employer must conduct evaluations of the workplace as necessary to ensure proper implementation of the program, and must consult with employees to ensure proper use.

#### (j) Recordkeeping

- Records of medical evaluations must be retained and made available per 29 CFR 1910.1020.
- A record of fit tests must be established and retained until the next fit test.
- A written copy of the current program must be retained.

#### (k) Implementation Dates

- Federal:
  - Determination that respirator use is required shall be completed no later than 9/8/98.
  - o Compliance with all other provisions of this standard shall be completed no later than 10/5/98.
- Cal OSHA Title 8 Section 5144. Effective date: Nov 23, 1998.
  - Determination that respirator use is required shall be completed not later that 150 days after the effective date (Apr 22, 1999.)

- Compliance with all the other provisions of the standard shall be completed no later than 180 days after the
  effective date (May 22, 1999.)
- WISHA Chapter 296-62 WAC Part E.
  - Adoption of latest Federal Rules are still in proposed rule stage as of the publication of this Bulletin. However WISHA has existing Respirator Standards in place now.

# **ACTION**

Employers should take note of the requirements and the triggering limits for respirator usage.

The Federal OSHA website contains valuable information on Respirator programs and compliance. In particular they have posted the OSHA Directive CPL 2-0.120 - Inspection Procedures for the Respiratory Protection Standard; Major Requirements of OSHA's Respiratory Protection Standard; and the Small Entity Compliance Guide for the Revised Respiratory Protection Standard.

Go to: http://www.osha-slc.gov/SLTC/respiratory\_advisor