

Respirator Use and Training

Description:

Occupational Safety and Health Administration (OSHA) regulations found in 29 CFR 1910.134 require employers to provide respiratory protection and respirator training to employees whose health may be affected by exposure to air contaminated by harmful dusts, fogs, fumes, mists, gases, smokes, sprays or vapors.

Regulatory Reference

29 CFR §1910.134 Respiratory protection.

Applies to:

Although there may be more than one potential application, this regulation will apply most often in the propane industry to employees engaged in applying coatings to propane tanks and cylinders.

General Requirements:

Where respirators are required, the employer is responsible for establishing and maintaining a respiratory protection program that meets the requirements outlined in 29 CFR 1910.134(c). Basic requirements include:

- (1) Designation of a program administrator who is qualified by appropriate training or experience to oversee the respiratory protection program and conduct the required evaluations of program effectiveness.
- (2) Identifying and evaluating the respiratory hazard(s) in the workplace, including a reasonable estimate of employee exposures to respiratory hazard(s) and identifying the contaminant's chemical state and physical form.

The first step in the process should be the careful examination of Material Safety Data Sheets (MSDSs) for chemicals received from suppliers. MSDSs should list the type of respirator and/or respirator filtration cartridge suitable for protecting persons using the chemical. Respirators and cartridges have ratings that conform to National Institute for Occupational Safety and Health (NIOSH) specifications, and chemical MSDSs should designate the appropriate NIOSH certified respirator requirements in the Personal Protection Equipment section of the MSDS. For painting operations, the MSDSs of all coating materials including primers, paints and solvents should be examined.

- (3) After workplace respiratory hazards are identified, a worksite-specific written respiratory protection program must be established and implemented. Required program elements include:
 - (a) Procedures for selecting respirators for use in the workplace;
 - (b) Medical evaluations of employees required to use respirators (performed by a physician or other licensed health care professional);
 - (c) Fit testing procedures for tight-fitting respirators;
 - (d) Procedures for proper use of respirators in routine and reasonably foreseeable emergency situations;

- (e) Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators;
 - (f) Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators;
 - (g) Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations;
 - (h) Training of employees in the proper use of respirators, including putting on and removing them, any limitations on their use, and their maintenance; and
 - (i) Procedures for regularly evaluating the effectiveness of the program.
- (4) The employer is required to select a NIOSH-certified respirator for the identified respiratory hazard(s), and establish an on-going monitoring program to ensure that employees are properly trained and using the prescribed respirator. The employer must also monitor employees to ensure that they comply with respirator test fitting, cleaning, storage and maintenance provisions of the program.
- (5) Prior to assigning an employee to a task requiring respiratory protection, the employer shall provide a medical evaluation to determine the employee's ability to use a respirator. A standardized questionnaire (Appendix C to §1910.134: OSHA Respirator Medical Evaluation Questionnaire) may be used by a physician or other licensed health care professional (PLHCP) or the employer to determine an employee's ability to use a respirator. A written recommendation regarding the employee's ability to use a respirator must be obtained from a physician or other licensed health care professional if the employee gives a positive response to any question among questions 1 through 8 in Section 2, Part A of Appendix C or whose initial medical examination demonstrates the need for a follow-up medical examination.
- (6) Authorized respirator users must be provided initial respirator training and recurring annual training.

If the employer determines respirator use is not required, the employer may provide respirators at the request of employees or permit employees to use their own respirators, if the employer determines that such respirator use will not in itself create a hazard. If the employer determines that any voluntary respirator use is permissible, the employer shall provide the respirator users with information contained in Appendix D to 29 CFR 1910.134 entitled, "Information for Employees Using Respirators When Not Required Under the Standard." In addition, the employer must establish and implement those elements of a written respiratory protection program necessary to ensure that any employee using a respirator voluntarily is medically able to use that respirator, and that the respirator is cleaned, stored and maintained so that its use does not present a health hazard to the user. An exception to this requirement is that employers are not required to include in a written respiratory protection program those employees whose only use of respirators involves the voluntary use of dust masks.

Training Requirements:

Affected employers are required to provide effective initial and annually recurring training to employees required to use respirators. Through training and documentation the employer shall ensure that each employee can demonstrate knowledge of at least the following:

- (1) Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator;
- (2) What the limitations and capabilities of the respirator are;
- (3) How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;

- (4) How to inspect, put on, remove, use, and check the seals of the respirator;
- (5) What the procedures are for maintenance and storage of the respirator;
- (6) How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; and
- (7) The general requirements of the OSHA respiratory protection standard.

Maintenance and Review

Respiratory Protection Program Record keeping

Affected employers are required to establish and retain written information regarding

- (a) Employee medical evaluations
- (b) Respirator fit testing
- (c) Respirator Protection Program
- (d) Employee Training

A thorough understanding of 29 CFR 1910.134 and the mandatory appendices to the standard are essential to company managers or others responsible for compliance with OSHA's respiratory protection standard.

Workplaces, chemical Material Safety Data Sheets (MSDS), and assigned employee tasks should be periodically reviewed to be sure that respiratory PPE and training is kept current with actual respiratory hazards identified. Documented manager and supervisor "walk-through surveys" can be scheduled on a periodic basis to verify proper use, maintenance, cleaning, and storage of respirators.

Additional Information and Resources

Appendix A to §1910.134 Fit Testing Procedures (Mandatory)

Appendix B-1 to §1910.134: User Seal Check Procedures (Mandatory)

Appendix B-2 to §1910.134: Respirator Cleaning Procedures (Mandatory)

Appendix C to §1910.134 OSHA Respirator Medical Evaluation Questionnaire (Mandatory)

Appendix D to §1910.134 Information for Employees Using Respirators When Not Required Under the Standard (Mandatory)

Respirator training programs are available from a number of safety equipment supply companies, and from respirator manufacturers.

Formal training programs are available from a number of safety training firms and publishers.