TEAMSTERS Safety & Health FACTS
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RESPIRATORY PROTECTION

29 CFR 1910.134

OSHA law requires that engineering controls rather than respirators be used to solve most air contamination problems. Respirators are too often used as a permanent solution. The more you know about respirators and their regulations, the more you can improve this type of situation.

Respirators

Respirators are just about the most unpleasant and least effective type of personal protective equipment you can be asked to wear. They furnish protection against contaminants in the air, but they are a last resort when the toxic substance can't be removed by substituting different materials or by implementing engineering controls (ventilation and/or enclosure). Another use for respirators is as a key component of personal protective equipment to be used during emergency situations, such as chemical spills.

In general, workers should accept the use of respirators if:

- They are a short-term, temporary measure while a plan for engineering controls is carried out on a definite timetable;
- They are needed for rarely performed procedures for which other precautions have failed;
- They are correctly maintained for use in emergencies, such as chemical spills; and,
- They are a last resort for a problem that can't be solved otherwise

Legal Responsibility

If respiratory protection is needed, the employer is required to provide the equipment and make sure that it is worn. However, when the situation permits, the employer should develop a schedule for completing engineering controls. Providing respirators does not exempt the employer from a citation for failure to provide feasible engineering controls.

Supervisors, as well as workers, should be required to comply with the company respirator program and the OSHA standard.

OSHA's Respiratory Protection Standard also requires employers to carry out other procedures to ensure the health and safety of workers.

Minimum Requirements for an Acceptable Respiratory Protection Program

Legal requirements for a respirator program are found in the General Industry Standards (29 CFR 1910.134). These requirements also apply to the construction industry. The highlights of the rules are as follows:

Written Program

Where respirators are necessary to protect the health of the employee or wherever respirators are required by the employer, the employer should establish and implement a written respiratory protection program with worksite-specific procedures.

- Make sure the employer goes through this step with the Union safety representative and/or health and safety committee.

Respirator Selection

The employer should select and provide an appropriate respirator based on the respiratory hazard(s) a worker is exposed to and other factors that may affect respirator performance and reliability.

- Respirators work either for particles (dusts, mists, fumes) or gases and vapors. A filtering facepiece (dust mask) usually provides no protection against vapors or gases.

- Somewhere on the respirator, in the package insert, or in the instruction manual, there must be a "National Institute for Occupational Safety and Health (NIOSH)" approval number (for example TC-21C-132) and a description of the general class of contaminants the respirator protects against. Ask the employer for a copy of the manufacturer's written description of the respirator.

- If an employer provides respirators at the request of employees or allows employees to use their own respirators, the employer will be responsible for ensuring that the respirator is the correct type for the hazard and that its use will not create a hazard. The voluntary user should also be provided with certain information in the OSHA Respiratory Protection Standard, commonly known as Appendix D.

- If air sampling has been performed, you may request information about the type and level of the air contaminants measured. If dust levels are very high, for example, the disposable dust mask may not work.

Medical Evaluation

Workers should not be assigned to tasks that require the use of respirators unless it has been determined that they are physically able to use a respirator. A physician or other licensed health care professional should perform medical evaluations using an OSHA-required medical questionnaire or an initial medical examination. The respirator user's medical status should be reviewed periodically depending on medical symptoms, changes in workplace conditions, and evaluation of the respiratory protection program.

- A worker who has breathing/lung problems or heart trouble, for example, may not be able to tolerate the extra work required to breathe through a respirator.

- In most cases, the technology for controlling hazards through proper ventilation does exist and can reduce the need to wear respirators. The union should push the company to find and use this technology wherever appropriate.

Fit-testing

All employees who wear respirators must be fit-tested before first using a tight-fitting facepiece respirator, whenever a different respirator facepiece (size, style, model or make) is used, and at least annually. The employer should select respirators from a sufficient number of models and sizes to ensure a good mask-to-face seal, and so that the respirator is acceptable to, and correctly fits, the user.

Fit testing should be conducted by a trained professional and can be performed in two ways. First, in quantitative fit testing, the amount of leakage into a respirator is measured using instruments. In qualitative fit testing, the subjective sensation (taste, irritation, smell) of the wearer toward a particular test agent is relied upon.

Respirator Use

The employer should establish and implement procedures for the proper use of respirators. In addition, the employer should evaluate the work area conditions to ensure the continued effectiveness of the respirator and should establish procedures to protect employees in all atmospheres considered immediately dangerous to life or health (IDLH).

The employer should not permit respirators with tight-fitting facepieces to be worn by employees who:

- have facial hair that comes between the sealing surface of the facepiece and the face; or
- wear corrective glasses or goggles or other personal protective equipment in a manner that would interfere with the seal of the facepiece to the face of the user.

Many studies have shown that bearded persons cannot achieve a satisfactory seal in the area of contact between the face and the respirator facepiece. Several types of respirators such as loose-fitting hoods or helmets can, however, accommodate bearded individuals and are available for routine or emergency use.

Maintenance and care

The employer is required to provide for the cleaning and disinfecting, storage, inspection, and repair of respirators used by employees.

- Respirators should be cleaned and disinfected as often as necessary. Those used by more than one worker should be thoroughly cleaned and disinfected before being worn by a different worker.

- All respirators should be stored in ways that would protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.

- All respirators used in routine situations should be inspected before each use and during cleaning. Respirators for emergency use, such as self-contained devices, should be thoroughly inspected at least monthly and checked before and after each use.

- Respirators that fail an inspection or are found to be defective should be removed from service by the employer, and either discarded or repaired by appropriately trained persons.

Training and Information

The employer should provide effective training to employees prior to requiring the employee to use a respirator. The training must be comprehensive, understandable, and occur annually, or more often if necessary.

Workers should demonstrate knowledge of:

- why the respirator is necessary;
- its limitations and capabilities;
- its use during routine and emergency conditions;
- procedures for maintenance and storage;

- how to recognize medical symptoms that may interfere with respirator use; and
- the requirements of this standard.

Ideally, training should be carried out by a trained safety professional or jointly with the Union safety representative or committee. All supervisors should receive this training as well.

Program Evaluation

The employer should conduct evaluations of the workplace, including air contaminant monitoring, as necessary to ensure that the written respiratory protection program is being properly implemented and remains effective.

The employer should also regularly consult with employees who are required to use respirators to hear their views on program effectiveness and to identify any problems.

- The employer should regularly review all aspects of the respiratory protection program, including air contaminant measurements and progress on engineering controls with the safety representative or committee.

Recordkeeping

The employer should establish and keep written records of required medical evaluations (as required by 29 CFR 1910.1020), qualitative and quantitative fit tests, and a written copy of the current respiratory program.