

**SECTION 15.45: RESPIRATORY PROTECTION**  
**Last Updated: 11/03**

Respiratory protection to prevent diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, will be accomplished as much as possible by engineering controls or substitution of materials used. When such measures are not feasible, or while such measures are being implemented, respirators will be supplied by the employer and used to protect the health of the employee. This guideline refers to the respiratory protection standard, 29 CFR, 1910.134.

Respirators function by two basic methods; either purifying the contaminant through filters, or by supplying breathable air from tanks or compressors. Filters may contain fibers for mechanical filtration of solid particulates, or may contain absorbents to which the contaminant vapor adheres as it passes through. Cartridge respirators and gas masks are the two main types of purifying respirators. The various filters available for these units are specific to the contaminant.

In cases where respirators will be used, written procedures must be developed to address the following issues:

- Medical qualification of the user. Due to certain respiratory or circulatory conditions, some workers may not be able to wear respirators. This evaluation should be made by a qualified physician and reviewed periodically. In addition, facial hair, glasses, or other attributes may make the use of some respirators unsafe. These conditions should be addressed for each particular situation.
- Training on how respirators are selected, the appropriate use, inspection, cleaning, repair, and storage. Repairs must be made by experienced persons with parts designed for the unit.
- Fit testing instructions will be provided. Follow manufacturers instructions. It may be as simple as a vacuum test (placing hands over intakes to see if leakage occurs at face seal), or the use of chemical odorant or irritants to test integrity of seal.
- Training on the limitations of the particular respirator to be used. This is critical, if the respirator is to be used in a dangerous, toxic, or oxygen deficient atmosphere, emergency procedures must be in place. If the worker could be overcome, another person(s) must be available to initiate rescue with some means of communication available at all times.

Written procedures must include all necessary information to assure proper guidance to the worker and the supervisor. All aspects and responsibility for compliance must be addressed. Manufacturers instructions will provide the best source of information for a particular unit, and should be incorporated into the procedures, either directly, or by reference in training. Manufacturers instructions will not suffice as a complete written program. Ensure to document all training of employees and utilize an annual review of written respiratory protection program.