

## **Respiratory Protection**

### **General**

Work environments where airborne contaminants are present may require the use of respirators in order to protect the employee's health and safety. Engineering controls, such as enclosure or confinement of the operation, general and/or local ventilation, or substitution of a less toxic material, shall be initially implemented to eliminate as far as feasible any potential airborne contaminants (dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors). If, after these actions, respiratory hazards will still be present or produced, then the appropriate respiratory protection equipment shall be selected and provided to the employee.

### **Respiratory Hazards**

These include:

- oxygen deficiency,
- gas and vapor contaminants,
- particulate or fume contaminants, and the
- possible combination of any of these.

Respirators fall into three general classifications:

- air-purifying,
- air supplying, and
- combination air-purifying/air-supplying.

The selection of a respirator for any given situation requires consideration of the following factors:

- nature of the hazard,
- extent of the hazard,
- work requirements and conditions, and
- characteristics and limitations of available respirators.

### **Program Policy**

No employee shall be issued, required to wear, or use a respirator without the requirements of this program being met.

## Program Requirements

- 1) Written Respiratory Protection Plan - Employee's campus unit shall have a written respiratory protection plan approved by the Dept. of Environment, Health & Safety.
- 2) Hazard Assessment/Respirator Selection - The work supervisor is responsible for ensuring that the appropriate hazard assessment has been performed so that the proper respiratory protection can be and is selected.
- 3) Employee Medical Surveillance - each employee, prior to being assigned to an operation requiring respiratory protection, shall undergo examination by a licensed physician to determine that they are physically and physiologically capable of wearing and working with a respirator. As a minimum, this shall include a routine physical and a pulmonary function test.
- 4) Respirator Fit Testing - each employee assigned a respirator shall be fit tested to assure that the respirator assigned to them provides a tight seal. Employees with facial hair that interferes with the respirator's seal must either shave or shall not be allowed to wear air-purifying respirators. Employees shall not wear normal corrective lenses (glasses) with full-face respirators because the earpieces interfere with the seal. Special corrective lenses designed for full-face respirators can be purchased.
- 5) Respiratory Safety Training - Both the user of the respirator and the supervisor shall be trained in the proper selection, use, limitations, and maintenance of respirators.
- 6) Respirator Maintenance - The user of a respirator shall be responsible for performing routine inspection, maintenance, cleaning, and storage of their respirator if it is of the reusable type. Problems should be identified to the supervisor and defective respirators must immediately be repaired or replaced.

## Program Assistance

Contact the KU - Department of Environment, Health & Safety for assistance with any of the above **(864-4089)**.