



## **Environmental Health & Safety**

# **RESPIRATOR PROGRAM**

2008

## **Purpose**

This program is applicable to all WKU employees, including student employees. Kentucky Occupational Health and Safety (KOSHA) states that only after administrated and engineering control measures (such as, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials) have not been effective in removing air contaminates then the selection of respirators may be introduced. KOSHA standards are not applicable to students in academic or recreational setting, however, it is of upmost importance that the University ensure that the exposure of students to airborne contaminants be kept at the lowest level possible and below the permissilbe exposure level.

## **Scope**

The provisions of this document have been established per the requirements listed in the Federal Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.134, as enforced at Western Kentucky University by the Commonwealth of Kentucky Labor Cabinet.

The following program establishes guidelines for safe practice in the use of respiratory protective devices of Western Kentucky University employees when all preferred methods of protecting them from breathing contaminated air have been determined to be insufficient to reduce the contamination to nonhazardous levels. This program also applies to employees who voluntarily wear respirators although respirators are not required.

## **Responsibilities**

### **EH&S**

- Department of Environmental Health & Safety is responsible for administering the respiratory protection program.
- Conducting training.
- Conducting qualitative fit testing with Bitrex and or saccharin.
- Administering the medical surveillance program.
- Will conduct air monitoring when deemed necessary, and will maintain records of such air monitoring. Air monitoring results must also be communicated to affected workers
- Maintaining training records and fit testing records required by the program.
- Evaluating the program.
- Updating written program, as needed.

### **Supervisors**

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the employees under their charge. Duties of the supervisor include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and medical evaluation.
- Ensuring the availability of appropriate respirators and accessories. Being aware of tasks requiring the use of respiratory protection.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- Ensuring that respirators fit well and do not cause discomfort.
- Continually monitoring work areas and operations to identify respiratory hazards.
- Coordinating with EH&S on how to address respiratory hazards or other concerns regarding the program.

## **Employees**

Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Employees must also:

- Care for and maintain their respirators as instructed, and store them in a clean sanitary location.
- Inform their supervisor if the respirator no longer fits well, and request a new one that fits properly.
- Inform their supervisor or EH&S of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.
- Guard against damage to the respirator

## **Students**

Students are responsible for following all health and safety standards and rules.

## **Professors, Instructors, Graduate Assistants**

Professors, Instructors, and Graduate Assistants who are in charge of students must first use all means by implementing administrative controls or engineering controls to rule out the possibility of respirator use. When the use of respirators are required each particular area must institute a respirator program for that area.

## **General Requirements**

General requirements for the respirator program according to 29 CFR 1910.134 including pertinent guidelines are as follows:

Respirators will be selected based on:

- (a.) The type of hazards to which the worker will be exposed;
- (b.) The estimated concentration of the contaminant; and
- (c.) Pertinent OSHA standards (substance-specific health standards)

### **Only NIOSH approved respirators shall be used.**

Before wearing a respirator at WKU, the user must first pass a medical exam that states the user is capable of wearing a respirator. The user shall be instructed and trained in the proper use of respirators and their capabilities and limitations. Training shall be given to the user initially and annually thereafter. This training may be conducted by an appropriate manufacturer's representative, the Environmental Health and Safety Department, or other qualified individuals.

User shall conduct user seal checks each time that they wear respirator. Positive or negative pressure checks shall be performed.

Tight-fitting respirators are not to be worn if employees have any condition, such as facial scars, facial hair, or missing dentures, that prevents them from achieving a good seal. Employees are not permitted to wear headphones, jewelry, or other articles that may interfere with the facepiece-to-face seal.

### **Voluntary Use**

Any employee who voluntarily wears a NIOSH approved respirator when a respirator is not required is subject to the medical evaluation, cleaning, maintenance, and storage elements of this program, and must be provided with Appendix D ("Information for Employees Using Respirators When Not Required Under the Standard").

### **Training**

- The reasons for the need of respiratory protection;
- The nature, extent, and effects of respiratory hazards to which one may be exposed;
- An explanation of why engineering controls are not available, or are not adequate and if feasible, what effort is being made to reduce or eliminate the need for respirators;
- An explanation of why a particular type of respirator has been selected
- An explanation of the operation, capabilities, and limitations of the respirator;
- Instruction in inspecting, donning, and wearing the respirator;
- Instruction of positive and negative pressure fit checks,
- An opportunity to handle the respirator, learn how to don and wear it properly;
- Instructions in how to recognize and cope with emergency situations;
- An explanation of how to maintain, clean and store the respirator; and
- Actual "fit testing" at which time several brands and sizes of respirators will be made available. For follow up fit tests it is recommended that the employee bring the respirator

that is worn at work to the fit test. The Environmental Health and Safety Department will conduct fit testing. (See Appendix A)

## **Cleaning**

Respirators shall be cleaned and disinfected (by the user) after each use, daily, or as often as necessary to ensure sanitary use of the respirator. In the event that respirators are shared, they must be cleaned and disinfected after each use. Respirators should be assigned to individual workers for their exclusive use whenever possible.

## **Change-Out Schedules**

Employees wearing APRs with P 100 filters for protection against dust particles and other particulates shall change the cartridges on their respirators when they first begin to experience difficulty breathing, resistance while wearing their masks or filter contacts water.

Employees using an organic vapor cartridge shall change the cartridges after an 8-hour work day or within the month that the cartridges have been used. Example: Painters and Zone techs

Employees using an acid cartridge shall change the cartridge after each use. Example: HVAC workers.

## **Storage**

A storage area that is in a convenient, clean and sanitary location must be provided for workers to store their respirators. The respirators should be stored so as to not damage the integrity of the mask.

Respirators should be inspected before use. Inspection shall include:

- (a.) Face piece
- (b.) Straps
- (c.) Inhalation and exhalation valves
- (d.) Filters or cartridges

Any sign of damage or excessive wear shall be reported to the employee's supervisor immediately. Only experienced persons using parts designed for that particular respirator may make repairs.

**Note:** *There are Self Contained Breathing Apparatus (SCBAs) stored in a number of mechanical rooms across campus. These units are placed by, and for the use of, outside vendors. WKU employees are not authorized to utilize this equipment.*

## **Medical Evaluation**

Employees who are either required to wear respirators, or who choose to wear an air purifying respirator voluntarily, must pass a medical exam before being permitted to wear a respirator on the job. Employees are not permitted to wear respirators until a physician has determined that they are medically able to do so. Any employee refusing the medical evaluation will not be allowed to work in an area requiring respirator use. The respirator user's medical status will be reviewed periodically. Employees must complete a medical questionnaire (Appendix B) and be approved to wear a respirator by a doctor at WKU Health Services. The doctor will provide a written medical opinion to the EHS office.

Medical records will be kept at Health Services the only record medically that is maintained at EH&S is the opinion from the doctor if employee is fit to wear a respirator.

An 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 the information contained in Appendix C to this section ("Information for Employees Using Respirators When Not Required Under the Standard"); If an employee uses a respirator voluntarily, he/she must be made aware of the proper use and limitations of the respirator so that the respirator itself does not present a hazard.

For further information contact the WKU Department of Environmental Health and Safety at 745-2395.

















