

# Hoosier Uplands Weatherization Respiratory Protection Program

## **Purpose**

Hoosier Uplands is committed to providing a safe and healthy work environment for its employees. On occasion, Weatherization employees (known as employee/employees here after) in the Weatherization Program may be exposed to airborne contaminants. In an effort to limit their exposure, Hoosier Uplands will do the following:

- Evaluate respiratory hazards in order to select appropriate respiratory protection.
- Ensure employees are medically able to wear respirators.
- Fit test employees with appropriate respirators.
- Establish procedures to ensure employees properly care for and maintain their respirators.
- Conduct continuing respirator training.
- Evaluate the program periodically to ensure its effectiveness.

## **Scope and Application**

This program applies to any employee who is required to wear a respirator during normal work activities and emergencies.

Any employee who requests to use a respirator when such use is not required may be supplied with a respirator by Hoosier Uplands or may be permitted to use his or her own if the company determines such respirator use will not create a hazard. Employees using respirators under this paragraph will be provided information in 29 CFR §1910.134, Appendix D, Information for Employees Using Respirators When Not Required Under the Standard (found at the end of this program). Prior to such voluntary use, the company will nonetheless implement the medical evaluation provisions under this program for such voluntary use and ensure the employee cleans, maintains and stores the respirator so it does not present a health hazard to the employee.

Exception to the above requirements for voluntary dust mask use: When an employee wears a dust mask, or filtering face piece, when not required, such use is not subject to the medical evaluation, cleaning, maintenance and storage requirements of this program.

This program will be regularly updated to reflect changes in workplace conditions and processes that affect employees' respirator use.

# **Employer and Employee Responsibilities**

## **Program Administrator**

The respiratory program administrator for Hoosier Uplands is Lowell Robling. This person's responsibilities include:

- Establishing procedures for selecting respirators
- Arranging employee medical evaluations
- Developing procedures for fit testing all respirators
- Developing procedures and schedules for inspecting, cleaning, maintaining, repairing and storing respirators
- Developing procedures for self-contained breathing apparatus, if used
- Ensuring employees are trained
- Evaluating the program annually

## **Employer**

Hoosier Uplands will provide appropriate respirators when needed to protect the health of its employees. As a part of the written respiratory protection program, work-site procedures will be provided for all employees required to wear respirators.

## **Employees**

Employees must maintain their respirators properly and not alter them in any way.

Each employee has the responsibility to wear his/her respirator when and where required and in a manner in which they trained.

Additional responsibilities of the employee include:

- Maintain and store their respirators as instructed in a sanitary location.
- Inform their supervisor or program administrator if the respirator no longer fits well, or new medical conditions arise and request a new evaluation when this occurs.

Any employee wearing a respirator in a hazardous area must take periodic breaks in a safe area to rest and wash the face piece when it needs cleaning. If the respirator does not work properly on the job, the employee must go to a safe area immediately and report the problem to the program administrator.

## **Program Elements**

### **Hazard Identification and Evaluation**

Hoosier Uplands Weatherization Auditors are equipped and trained with testing instruments and personal monitoring devices to check the atmosphere before entering an attic or crawl space area.

The program administrator along with the Weatherization Auditors will arrange these evaluations, and the information will be used to select and assign the proper respirators.

### **Respirator Selection**

Only filters and/or chemical cartridges matched to expected atmospheric contaminants known to be present will be used. A variety of respirator sizes will be kept in stock to ensure proper fits for all employees.

The program administrator is also responsible for selecting appropriate respirator filters and/or cartridges based on a review of safety data sheet (SDSs) or other relevant air-contaminant data. Hoosier Uplands will use only National Institute for Occupational Safety and Health- (NIOSH-) certified respirators.

Hoosier Uplands Weatherization Program does not foresee any instance where our workers will encounter IDLH atmospheres and will not knowingly expose workers to IDLH atmospheres. Respiratory program provisions for IDLH atmospheres are not included in this program and if the hazard identification process reveals any such areas in the vicinity of a company jobsite, provisions will be taken to require those areas be secured against entry and prevent access by our company's employees. Should entry to an IDLH atmosphere be required, a site-specific respiratory protection program will be developed for the IDLH hazards with specific equipment and training for affected employees. Such program will be separate from this program and fully address the hazards and controls needed to maintain the safety and health of our employees.

### **Medical Evaluations**

Each employee required to wear a respirator or who requests an air-purifying respirator must be medically evaluated before being fit tested. The program administrator will make arrangements for each employee to have a medical evaluation by a physician or other licensed health care professional (PLHCP). The program administrator will provide a copy of the OSHA Respirator Medical Evaluation Questionnaire (29 CFR §1910.134, Appendix C) to each employee who must wear respirators. The program administrator will collect completed questionnaires and give them to the PLHCP.

The program administrator also will provide the PLHCP with the following information:

- Type and weight of respirator each employee will use
- Duration and frequency of use
- Expected physical work effort
- Any other protective equipment and clothing needed
- Temperature and humidity extremes at the job site
- Air contaminants and concentration levels that each employee may encounter.

The PLHCP will discuss results of the evaluation with the employee and provide a written determination to the program administrator. The determination will not contain confidential medical information but will include:

- The PLHCP's opinion of the employee's ability to tolerate a respirator
- Any limitations of respirator use
- Any need for follow-up evaluations
- A statement that the employee has been informed of the determination

If the PLHCP recommends alternative respiratory protection, such as a powered-air purifying respirator, the program administrator will comply with the recommendation.

The program administrator will maintain a file of the PLHCP's written determination for each employee. Employees will receive follow-up medical evaluations under the following conditions:

- The employee reports medical signs or symptoms related to the use of the respirator.
- The PLHCP, a supervisor or the program administrator recommends a re-evaluation.
- Fit-test or other program information indicates a need for re-evaluation
- Changes in the workplace increase respiratory stress

### **Fit Testing**

All employees using a tight-fitting face-piece respirator must pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT). The program administrator will determine which test is appropriate for each type of respirator. Qualitative and quantitative fit tests will be administered with appropriate protocol from 29 CFR §1910.134, Appendix A. A QLFT will be used only to fit test negative pressure air-purifying respirators that achieve a fit factor of 100 or less.

Employees must be fit tested before they use a respirator for the first time; whenever they use a different respirator face piece; and after any changes in the physical condition that could affect respirator fit.

Fit tests will be administered using employees' assigned respirators (from previous fit-testing results) or from a selection of respirators set up for fit-testing purposes (for an initial fit test).

All employees must be fit tested annually.

## **Respirator Use**

### **Using Tight-fitting Respirators**

Employees who have beards or other conditions that interfere with the face-to-face seal or valve function cannot wear tight-fitting respirator face pieces. Clean-shaven skin must be in contact with all respirator sealing surfaces. PPE or clothing that interferes with the face-to-face seal or valve function is not permitted.

Corrective lenses with temple bars or straps that interfere with face-to-face sealing area cannot be used with any respirator.

Each employee must perform user seal checks before using a tight-fitting respirator. The procedures can be found in 29 CFR §1910.134, Appendix B-1.

### **Monitoring Respirator Effectiveness**

The program administrator will monitor and re-evaluate the effectiveness of employees' respirators after any significant changes in workplace conditions.

Employees must leave the areas in which they wear respirators when: they need to wash their faces or their respirator face pieces or components; they detect face piece leaks or change in breathing resistance; or they must change respirators, filters, cartridges or canister elements.

### **Respirator Maintenance and Care**

Before any new respirator is used, it must be washed, disinfected and inspected according to the manufacturer's instructions or the instructions in 29 CFR 1910.134, Appendix B-2.

Employees must clean and disinfect their own respirators after each use and store them in a convenient and sanitary location so the face pieces and valves are protected.

Respirators used for fit testing must be cleaned and disinfected after each use by the person conducting the fit test.

Employees must inspect their respirators before they use them and after they clean them. Inspection includes a check of respirator function; tightness of connections; and the condition of the elastomeric face piece, head straps, valves, connecting tubes, cartridges, canisters and filters.

### **Identity of Filters, Cartridges and Canisters**

All filters, cartridges and canisters must be maintained as received by the manufacturers, distributors or suppliers and labeled and color-coded with the NIOSH-approval label. The label cannot be removed and must remain legible. Defective filters, canisters and cartridges cannot be used and must be removed from service.

### **Air Quality in Atmosphere-supplying Respirators**

Compressed breathing air used in atmosphere-supplying respirators must meet the criteria established by the American National Standards Institute (ANSI) for grade D breathing air.

### **Training**

Before any employee wears a respirator for the first time, he or she must receive training on and demonstrate comprehension of:

- Why a respirator is necessary
- How improper fit, use or maintenance can compromise the protective effect of a respirator
- A respirator's capabilities and limitations
- How to use a respirator in emergency situations, including ones in which the respirator malfunctions
- How to inspect, put on and remove a respirator and check the seals
- Proper cleaning, maintenance and storage procedures
- How to recognize medical signs and symptoms that may limit or prevent effective respirator use

Training will be provided by the program administrator or other qualified person. The training will be fully documented, certifying that employees understand the concepts presented and have demonstrated how to use and wear the respirator.

The training must give each user an opportunity to handle the respirator; have it fitted properly; test its face-to-face seal; wear it in normal air for a trial period; and wear it in a test atmosphere.

Retraining must be performed annually or as deemed necessary by the program administrator.

Employees who are permitted to wear respirators must first read the information in 29 CFR §1910.134, Appendix D found at the end of this program.

### **Program Evaluation**

The program administrator will evaluate this program annually or more often if necessary to ensure it remains effective. The administrator will consult employees about proper respirator fit, selection, use and maintenance and make periodic workplace observations to confirm that respirators are being used and maintained properly.

### **Record Keeping**

The program administrator will maintain records of nonconfidential medical evaluation determinations, fit testing, training documentation and annual inspection audits and make them available to employees.

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

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here in Appendix B- 2. Equivalent effectiveness simply means that the procedures used must accomplish the objectives set forth in Appendix B-2, i.e., must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

### *I. Procedures for Cleaning Respirators*

- A. Remove filters, cartridges, or canisters. Disassemble face pieces by removing speaking diaphragms, demand and pressure- demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.
- B. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.
- C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.
- D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
  1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,
  2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,
  3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
- E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on face pieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.
- F. Components should be hand-dried with a clean lint-free cloth or air-dried.
- G. Reassemble face piece, replacing filters, cartridges, and canisters where necessary.
- H. Test the respirator to ensure that all components work properly.

## **Appendix D to Sec. 1910.134 (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard**

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.