

Respiratory Protection Program

Reviewed 9/09/2008

1.0	Purpose	-----	2
2.0	Scopes and Application	-----	2
3.0	Responsibilities	-----	2
	Program Administrator	-----	2
	Supervisor	-----	3
	Employees	-----	3
4.0	Program Elements	-----	3
	Selection Procedures	-----	4
	Medical Evaluation	-----	4
	Fit Testing	-----	5
	Respirator Use	-----	5
	Cleaning, Maintenance, Change Schedule		
	Storage	-----	6
	Training	-----	7
5.0	Program Evaluation	-----	7
6.0	Documentation and Record keeping	-----	7

1.0 Purpose

USGS/BRD Pacific Island Ecosystems Research Center (PIERC) primary function is to provide recommendations for planners and managers of biological resources based on sound research data. During the process of gathering scientific data, employees of PIERC may expose themselves to toxic substances that could potentially harm the individuals. The purpose of this respiratory protection program is to protect these employees from inhaling the vapors from toxic materials.

2.0 Scope

This program applies to all employees are exposed to harmful airborne contaminants. These employees must be enrolled in this respirator program. In addition, any employee who voluntarily wears a respirator when a respirator is not required (i.e. in certain maintenance and lab operations) is subject to the medical evaluation, cleaning, maintenance, and storage elements of this program and must be provided with certain information specified in this section of the program. Employees who voluntarily wear filtering face pieces (dust Masks) are not subject to the medical evaluation, cleaning, storage, and maintenance provision of this program.

Employees participating in the respiratory protection program do so at no cost to them. The expenses associated with training, medical evaluations and respiratory protection equipment will be borne by the agency.

3.0 Responsibilities

Program Administrator

The Safety Officer is the Program Administrator of this program and is responsible for administering the Respirator Protection Program. Duties of the Program Administrator include:

- Monitoring respirator use to ensure the respirators are used in accordance with their certifications.
- Arranging for and/or conducting training.
- Ensuring proper storage and maintenance of respirator protection equipment.
- Conducting qualitative fit testing.
- Administering the medical surveillance program.
- Maintaining records required by the program.
- Evaluating the program.
- Updating the 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. Duties of the supervisor include:

- Ensuring that employees have received appropriate training, fit test, and annual medical evaluation.
- Ensuring the availability of appropriated respirators and accessories.
- Being aware of the tasks requiring the use of respirators.
- Enforcing the proper use of respiratory protection when necessary.
- Ensuring the respirators are properly cleaned, maintained, and stored according to the respiratory protection plan.
- Ensuring that respirators fit well and do not cause discomfort.
- Coordinating with the Program Administrator 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 respirator as instructed, and store them in a clean sanitary location.
- Inform their supervisor or the Program Administrator of any respiratory hazard that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding the program.

4.0 Program Elements

Selection Procedures

The Program Administrator will select respirators to be used on site, based on the hazards to which workers are exposed and in accordance with all OSHA standards. The Program Administrator will conduct a hazard evaluation for each operation, process, or work area where airborne contaminants may be present in routine operations or during an emergency. The hazard evaluation will include:

1. Identification and development of a list of hazardous substances used in the workplace.
2. Review of work processes to determine where potential exposures to these hazardous substances may occur. This review shall be conducted by surveying the workplace and talking with employees and supervisors.

Updating the Hazard Assessment

The Supervisor must revise and update the hazard assessment as needed. If an employee feels that respiratory protection is needed during a particular activity, she/he is to contact her or his supervisor or Program Administrator. The Supervisor or Program Administrator will evaluate the potential hazard. If it is determined that respirator protection is necessary, all elements of this program will be in effect for those tasks and this program will be updated.

NIOSH Certification

All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in accordance with the terms of that certification. Also, all filters, cartridges, and canisters must be labeled with the appropriate NIOSH approved label. The label must not be removed or defaced while the filter, cartridge or canister is in use.

Medical Evaluation

Employees who are either required to wear respirators, or who choose to wear and APR voluntarily, must pass a medical exam or have the medical exam waived by a physician 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.

After an employee has received clearance and begun to wear his or her respirator, additional medical evaluations will be provided under the following circumstances:

- Employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing.
- A physician informs the Supervisor or Program Administrator the employee needs to be reevaluated.
- Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation.
- A change occurs in workplace conditions that may result in an increased physiological burden on the employee.

All examinations and questionnaires are to remain confidential between the employee and the physician.

Fit Testing

Fit testing is required for employees wearing half-facepieces APRs. Employees voluntarily wearing half-facepieces APRs may also be fit tested upon request.

Employees who are required to wear half-facepiece APRs will be fit tested:

- Prior to being allowed to wear any respirator with a tight fitting facepiece.
- Annually
- When there are changes in the employee's physical condition that could effect respiratory fit (e.g., obvious change in body weight, facial scarring, etc.)

Employees will be fit tested with the make, model, and size of respirator that they will actually wear. Employees will be provided with several models and sizes of respirators so that they may find an optimal fit.

The Program Administrator will conduct the fit test following the OSHA approved Isoamyl Acetate protocol.

Respirator Use

General Use Procedures

- Employees will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each the respirator. In addition, the respirator shall not be used in a manner for which it is not certified by NIOSH or by its manufacturer.
- All employees shall conduct user seal checks each time that they wear their respirator. Employees shall use either the positive or negative pressure check (depending on which test works best for them) specified in Appendix C of the Respiratory Protection Program.
- Employees are not permitted to wear tight-fitting respirators if they 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.

Respirator malfunction

For any malfunction of an APR (e.g., such as breakthrough, facepiece leakage, or improperly working valve), the respirator wearer should no longer perform that task and inform her or his supervisor that the respirator no longer functions as intended.

Cleaning, Maintenance, Change Schedules and Storage

Cleaning

Respirators issued for the exclusive use of an employee shall be cleaned as often as necessary or whenever recommended to do so by a supervisor

The following procedure is to be used when cleaning and disinfecting respirators:

- Disassemble respirator, removing any filters, canisters, or cartridges.
- Wash the facepiece and associated parts in a mild detergent with warm water. Do not use organic solvents.
- Rinse completely in clean warm water.
- Wipe the respirator with disinfectant wipes (70% Isopropyl Alcohol) to kill germs.
- Air dry in a clean area.
- Reassemble the respirator and replace any defective parts.
- Test the respirator to ensure that all components work properly.
- Place in a clean, dry plastic bag or other airtight container.

The Supervisor will ensure an adequate supply of appropriate cleaning and disinfection material is available. If supplies are low, employees should contact their supervisor.

Maintenance

Respirators are to be properly maintained at all times in order to ensure that they function properly and adequately protect the employee. Maintenance involves a thorough visual inspection for cleanliness and defects. Worn or defective parts will be replaced prior to use. No components will be replaced or repairs made beyond those recommended by the manufacturer.

The following checklist will be used when inspecting respirators:

- Facepiece:
 - cracks, tears or holes
 - facemask distortion

- Headstraps:
 - breaks or tears
 - broken buckles

- Valves:
 - residue or dirt
 - cracks or tears in valve material

- Filters/Cartridges:
 - approval designation
 - gaskets
 - cracks or dents
 - proper cartridge for hazard

Change Schedules

Employees shall change their cartridges after 300 hours of use or earlier if smell, taste or irritation from contaminants is detected.

Storage

Respirators must be stored in a clean, dry area, and in accordance with the manufacturer's recommendations. Each employee will clean and inspect their own air purifying respirator in accordance with the provisions of this program and will store their respirator in a plastic bag. Each employee will have her/his name on the bag and that bag will be used to store that employee's respirator.

The supervisor will store respirator components in their original manufacturer's packaging in the equipment storage room.

Defective Respirators

Respirators that are defective or have defective parts shall be taken out of service immediately. If, during an inspection, an employee discovers a defect in a respirator, he/she is to bring the defect to the attention of her/his supervisor. The supervisor will decide whether to:

- Temporarily take the respirator out of service until it can be repaired.
- Perform a simple fix on the spot such as replacing a head strap.
- Dispose of the respirator due to an irreparable problem or defect.

When a respirator is taken out of service for an extended period of time, the respirator will be tagged out of service, and the employee will be given a replacement of similar make, model, and size. All tagged out respirators will be kept in storage inside the Program Administrator's office.

Training

The Program Administrator will provide training to respirator users and their supervisors on the contents of the Respirator Protection Program and their responsibilities under it, and the OSHA Respiratory Protection Standard. Workers will be trained prior to using a respirator in the workplace. Supervisors will also be trained prior to using a respirator in the workplace or prior to supervising employees that must wear respirators.

The training course will cover the following topics:

- The PIERC Respirator Protection Program.
- The OSHA Respirator Protection Standard (29CFR1910.134).
- Proper selection and use of respirators.
- Limitations of respirators.
- Respirator donning and user seal (fit) checks.
- Fit testing
- Maintenance and storage.

Employees will be trained annually or as needed. Employees must demonstrate their understanding of the topics covered in the training through hands-on exercises. The Program Administrator will document respirator training and the document will include the type, model, and size of respirator for which each employee has been trained and fit tested.

5.0 Program Evaluation

The Program Administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluations will include regular consultations with employees who use respirators and their supervisors, site inspections and review of records.

6.0 Documentation and Record keeping

A written copy of this program and the OSHA standard is kept in the Program Administrator's office and is available to all employees who wish to review it.

Also maintained in the Program Administrator's office are copies of training and fit test records. These records will be updated as new employees are trained, as existing employees receive refreshers training, and as new fit tests are conducted.

The Program Administrator will also maintain copies of the medical records for all employees covered under the respirator program. The complete medical questionnaire and the physician's documented findings are confidential and will remain at the

physician's office. PIERC will only retain the physicians written recommendation regarding each employee's ability to wear a respirator.