50th ANNIVERSARY Florida Institute of Technology High Tech with a Human Touch

Title: Respiratory Protection Program

Applies to:	Date Issued	Date Revised
Florida Tech	07/20/2007	09/11/2007

Regulatory Reference

1. OSHA's Respiratory Protection Standard (29CFR1910.134)
2. National Institute for Occupational Health and Safety (NIOSH) 42 CFR 84
3. Respiratory Protection Standard for M. Tuberculosis (29 CFR 1910.139)
4. OSHA standards for numerous toxic air contaminants

Florida Institute of Technology

Respirator Protection Program

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C O N T E N T S

0. Important Terms and Definitions[1]

Air-purifying respirator means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-Purifying element.

Assigned protection factor (APF) means the workplace level of respiratory protection that a respirator or class of respirators is expected to provide to employees when the employer implements a continuing, effective respiratory protection program as specified by this section.

Atmosphere-supplying respirator means a respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

Canister or cartridge means a container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

Demand respirator means an atmosphere-supplying respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation.

Emergency situation means any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant.

Employee exposure means exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

End-of-service-life indicator (ESLI) means a system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.

Escape-only respirator means a respirator intended to be used only for emergency exit.

Filter or air purifying element means a component used in respirators to remove solid or liquid aerosols from the inspired air.

Filtering facepiece (dust mask) means a negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium.

Fit factor means a quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

Fit test means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also Qualitative fit test QLFT and Quantitative fit test QNFT.)

Helmet means a rigid respiratory inlet covering that also provides head protection against impact and penetration.

High efficiency particulate air (HEPA) filter means a filter that is at least 99.97% efficient in removing monodisperse particles of 0.3 micrometers in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100, and P100 filters.

Hood means a respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.

Immediately dangerous to life or health (IDLH) means an atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to escape from a dangerous atmosphere.

Interior structural firefighting means the physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage. (See 29 CFR 1910.155)

Loose-fitting facepiece means a respiratory inlet covering that is designed to form a partial seal with the face.

Maximum use concentration (MUC) means the maximum atmospheric concentration of a hazardous substance from which an employee can be expected to be protected when wearing a respirator, and is determined by the assigned protection factor of the respirator or class of respirators and the exposure limit of the hazardous substance. The MUC can be determined mathematically by multiplying the assigned protection factor specified for a respirator by the required OSHA permissible exposure limit, short-term exposure limit, or ceiling limit. When no OSHA exposure limit is available for a hazardous substance, an employer must determine an MUC on the basis of relevant available information and informed professional judgment.

Negative pressure respirator (tight fitting) means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

Oxygen deficient atmosphere means an atmosphere with an oxygen content below 19.5% by volume.

Physician or other licensed health care professional (PLHCP) means an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide, some or all of the health care services required by paragraph (e) of this section.

Positive pressure respirator means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Pressure demand respirator means a positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.

Qualitative fit test (QLFT) means a pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

Quantitative fit test (QNFT) means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Respiratory inlet covering means that portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. It may be a facepiece, helmet, hood, suit, or a mouthpiece respirator with nose clamp.

Self-contained breathing apparatus (SCBA) means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

Service life means the period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer.

Supplied-air respirator (SAR) or airline respirator means an atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

Tight-fitting facepiece means a respiratory inlet covering that forms a complete seal with the face.

User seal check means an action conducted by the respirator user to determine if the respirator is properly seated to the face.

1. Purpose

The purpose of this Respiratory Protection Program (RPP) is to:

- Protect Florida Tech employees and students from identified inhalation exposure & respiratory hazards include but are not limited to harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors.

- Establish Florida Tech's written compliance as required by the Occupational Safety and Health Administration (OSHA).

This Florida Tech Respirator Program contains guidelines for administering an effective respiratory protection program and provides the information, training, and equipment necessary for proper selection, use and maintenance of respirators. The Program is updated annually to address the changing needs of the University along with federal regulatory revisions. This document serves as a standard operating procedure (SOP) for faculty and staff who are required to wear a respirator during work & school assignments.

Engineering controls, such as ventilation and substitution of less toxic materials, are the first line of defense at Florida Tech; however, engineering controls may not be always feasible for some operations, or may not always completely control the identified hazards. In these situations, respirators and other protective equipment must be used.

In addition, some employees have expressed a desire to wear respirators during certain operations that do not require respiratory protection. As a general policy, University Safety Office will review each of these requests on a case-by-case basis. If the use of respiratory protection in a specific case will not jeopardize the health or safety of the worker(s), the department may provide or allow employees to provide their own respirators for voluntary use.

2. Scope and Application

This program applies to all employees and research staff who are required to wear respirators during normal work operations, and during some non-routine or emergency operations such as a spill of a hazardous substance. This also includes faculty and staff involved in certain research activities. All employees working in these areas and engaged in certain processes or tasks must be enrolled in the Florida Tech's Respiratory Protection Program (RPP). Employees participating in the respiratory protection program do so at no cost to themselves. The expense associated with required training, medical evaluations and respiratory protection equipment will be borne by the employing department.

Table 1: Sample Work Activities and Respirators

Work Process	Type of Respirator
Chemical Hazards	Full face Air-purifying Respirator (APR) Half-face Air-purifying Respirator (APR)
Biohazards	N95 disposable N99 disposable Powered Air-purifying Respirator (PAPR) with hood
Asbestos	Half, Full face Air-purifying Respirator (APR) or Powered Air-

Management	purifying Respirator (PAPR)
Pesticide Application	Powered Air-purifying Respirator (PAPR) or half face Air-purifying Respirator (APR)
Emergency response	Half, Full Face Air-purifying Respirator (APR),Self-Contained Breathing Apparatus (SCBA), Powered Air-purifying Respirator (PAPR)

3. Responsibilities

A. University & Department

Florida Tech has the overall responsibility for providing a place of employment free of recognized hazards and unsafe conditions, as well as complying with federal, state, and local standards and regulations.

Departments shall provide such equipment and supplies as are necessary to comply with this policy. Departments shall bear the cost of respiratory protective equipment, the cost of miscellaneous supplies & maintenance, and the cost of medical evaluations required by the Respiratory Program.

The Respiratory Protection Program is administered for Florida Institute of Technology through the Department of Safety. The Director of the Department of Safety shall act in the capacity as **Respiratory Program Coordinator (RPC)**, and work to ensure all elements set forth in this Program are followed.

The **Respiratory Program Coordinator (RPC)** is solely responsible for this program and has full authority to make necessary decisions to ensure its success. The RPC has assigned responsibility for implementation and day to day operation of the respirator program to a designated **Respiratory Program Administrator (RPA).** The RPA will consult with other authorities on health hazard recognition and respiratory protection if there is any doubt regarding hazard determination, or proper selection and use of respirators.

The Respiratory Program Coordinator for the Florida Institute of Technology is H. Greg Peebles III.

Each authorized department employee (**Appendix F**), while in an area that requires the use of a respirator, shall wear the appropriate, properly fitted, NIOSH approved respirator assigned by University Safety Office (USO).

Deans, Department Chairpersons and RPAs have overall responsibility for implementation of the Respiratory Protection Program within their departments.

B. University Safety Office (USO)

USO is responsible for:

1. This Program and has authority to make the technical and administrative decisions necessary for program implementation.

2. Monitoring the workplace to determine employee exposures and the need for respiratory protection

3. Consulting with the RPA or department supervision to select the best type of respirator for their purpose.

4. Performing respirator fit test on respirator wearers as required.

5. Training employees required to wear respirators.

6. Conducting respirator audits periodically to determine program effectiveness and regulatory compliance.

C. Respiratory Program Administrator (RPA)

Department RPA may serve as a liaison between the department and the USO for the dissemination of information or resolution of concerns. Specifically, each University RPA is required to:

1. Consider engineering or administrative controls that would eliminate the need for respiratory protection in the department.

2. Work with USO to implement the Respirator Program if engineering or work practice controls are determined to be infeasible.

3. Develop Standard Operating Procedures (SOPs) for department activities that require respirator use.

4. Report any accidents, injury or illness that may be related to the use of respiratory protection.

The RPA is responsible for administering the respiratory protection program. Duties of the respiratory program administrator (RPA) include:

• Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards.

• Selection of respiratory protection options.

• Monitoring respirator use to ensure that respirators are used in accordance with their certifications.

• Arranging for and/or conducting training.

• Ensuring proper storage and maintenance of respiratory protection equipment.

• Conducting/ supervising qualitative fit testing with Irritant Smoke.

• Administering the medical surveillance program.

• Maintaining records required by the program.

- Evaluating the program.

- Updating written program, as needed.

The University Safety Office (USO) shall provide administrative support to assure compliance with the Policy. The RPA shall:

- Coordinate with the employee and supervisor and schedule personnel training with USO

- Assist USO in performing fit-test on their employees who are using respirators.

D. Supervisors

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. The employee's immediate supervisor is responsible for enforcing respirator use. 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 annual 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 the RPA on how to address respiratory hazards or other concerns regarding the program.

E. Employees

Employees are responsible for:

- Notifying their supervisor and/or RPA/USO if they:
    - o Have concerns or questions about workplace exposure,
    - o Questions about respirator use, or
    - o Exhibit possible signs or symptoms of workplace exposure.

- Wearing the appropriate respiratory protective device when performing activities in locations designated by the USO as requiring respiratory protection.

• Maintaining a facial surface consistent with a proper fit of the respiratory protective device.

• Performing routine care and preventive maintenance of their selected respirator as described in this program and any manufacturers' specific recommendations and completing the appropriate records.

• Guarding against damage to the respirator.

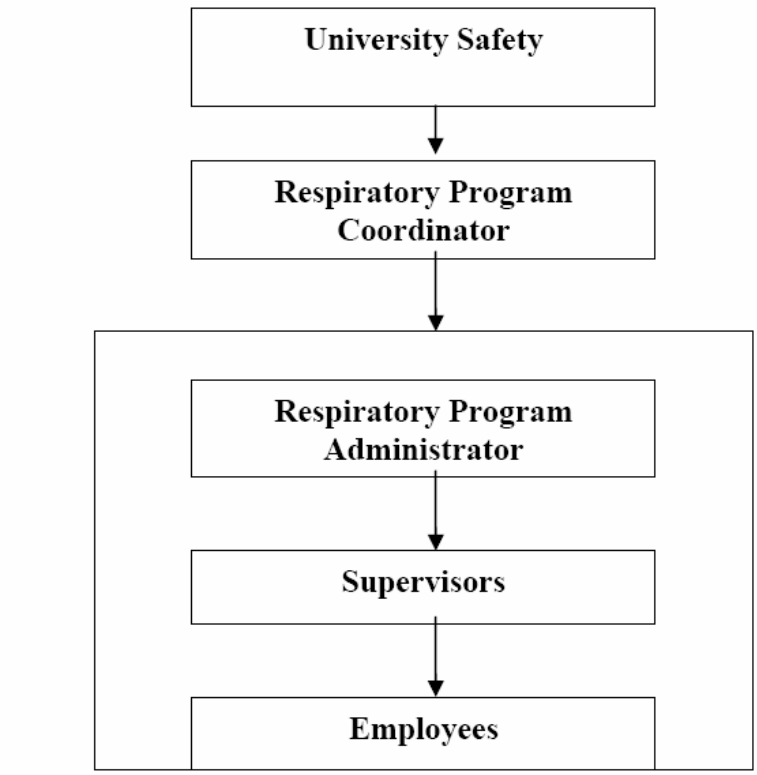
• Participating in fit testing and having their respirator available for inspection during fit testing.

• Participating in medical evaluation prior to respirator use and annually or as needed.

• Inspecting their respirator prior to each use.

• Immediately leaving the contaminated area if a respirator malfunction occurs and reporting the malfunction to the responsible person designated by the departmental supervisor in the written standard operating procedures; and

• Complying with departmental standard operating procedures and other requirements specified in this program.



4. Program Elements

4.1. Selection Procedure

The Respiratory Program Coordinator (RPC) will select respirators to be used on site, based on the hazards to which workers are exposed and in accordance with the OSHA standards. The RPC 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, by department, or work process.
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, reviewing process records, and talking with employees and supervisors.

The hazard evaluation may include exposure monitoring to quantify potential hazardous exposures. Monitoring will be conducted if the industrial hygienist conducting the evaluation determines that it is required. Monitoring will be performed by USO staff when needed.

4.2. Updating the Hazards Assessments

The department with the help of their respective RPAs and the Respirator Program Coordinator must revise and update the hazard assessment as needed (i.e., any time work process changes may potentially affect exposure).

If an employee feels respiratory protection is needed during a particular activity, they are to contact their immediate supervisor or RPA. The department with the assistance of RPC will evaluate the potential hazard. The department will then communicate the results of that assessment back to the employees. If it is determined that respiratory protection is necessary, all other elements of this program will be in effect for those tasks and this program will be updated accordingly.

4.3. 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 approval label. The label must not be removed or defaced while any of the above is in use.

4.4. Voluntarily Respirator Use

The department may provide respirators to employees for voluntary use at no charge. As a general policy the USO will review each of these requests on a case-by-case basis. The voluntary use of respiratory protection may be approved if it will not jeopardize the health or safety of the worker(s). The Program Administrator will provide all employees who voluntarily choose to wear respirators with a copy of Appendix D of the standard. (Appendix D details the requirements for voluntary use of respirators by employees). Employees choosing to wear a respirator must comply with the procedures for Medical Evaluation, Respirator Use, and Cleaning, Maintenance and Storage.

4.5. Medical Evaluation

Using a respirator may place a psychological and physiological burden on employees, which varies with the type of respirator worn, the job and workplace conditions in which the respirator is used, and the medical status of the employee. Each employee assigned a respirator in carrying out his/her job responsibilities is to receive a medical evaluation to determine his/her ability to use a respirator, before being fit tested or required to use the respirator in the workplace.

Employees who are required to wear respirators, or have special permission by USO to voluntarily wear a reusable air-purifying respirator (APR), 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 or licensed health care professional (PLHCP) 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.

Medical evaluation procedures are as follows:

- The medical evaluation will be conducted using the questionnaire provided in **Appendix C** of this respiratory protection program. The RPC will provide a copy of this questionnaire to all employees requiring medical evaluations.
- To the extent feasible, USO will assist employees who are unable to read the questionnaire (by providing help in reading the questionnaire). When this is not possible, the employee will be sent directly to the medical practitioner for medical evaluation.
- All affected employees will be given a copy of the medical questionnaire to fill out and they will bring the completed questionnaire to the medical practitioner. Employees will be permitted to fill out the questionnaire during working hours.
- Follow-up medical exams will be granted to employees as required by the standard, and/or as deemed necessary by the medical practitioner.
- All employees will be granted the opportunity to speak with the medical practitioner about their medical evaluation, if they request so.

The Respiratory Program Coordinator (RPC) has provided the Holzer Heath Center a copy of this Respirator program and will provide the following information for each employee when requesting a medical evaluation:

- a summary of the employee's exposure to a hazardous substance
- his or her work area or job title
- proposed respirator type and weight
- length of time required to wear respirator
- expected physical work load (light, moderate, or heavy)
- potential temperature and humidity extremes
- any additional protective clothing required

After an employee has received clearance and starts 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 RPC that the employee needs to be reevaluated;

- Information from the 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.

4.6. FIT Testing

Fit testing is required for employees wearing tight-fitting respirators. Employees voluntarily wearing half-facepiece APRs may also be fit tested upon request. Employees are to be fit tested prior to initial use of the respirator, or whenever a different respirator face-piece (size, style, model or make) is used, and at least annually thereafter. An additional fit test is conducted whenever the employee, supervisor, or the USO makes visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight. The employee may select a different respirator if he/she does not think the respirator fit is acceptable, even after passing the fit test.

The RPC will conduct fit tests following the OSHA approved Irritant smoke QLFT Protocol, or the Bitter Aerosol QLFT Protocol in the Respiratory Protection standard.

4.7. 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 particular model. In addition, the respirator shall not be used in a manner for which it is not certified by NIOSH or by its manufacturer or for an exposure or work activity that is not approved by USO.

All employees not wearing disposable N95 respirators 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).

All employees shall be permitted to leave the work area to maintain their respirator for the following reasons: to clean their respirator if the respirator is impeding their ability to work, change filters or cartridges, replace parts, or to inspect respirator if it stops functioning as intended. Employees should notify their supervisor before leaving the area.

4.8. Respirator Malfunction

For any malfunction of an APR (e.g., such as contaminant breakthrough, facepiece leakage, or improperly working valve), the respirator wearer should inform his or her supervisor that the respirator no longer functions as intended, and go to a designated safe area to maintain, repair or replace the respirator. The supervisor must ensure that the employee receives the needed parts to repair the respirator, or is provided with a new respirator.
All workers wearing atmosphere-supplying respirators will work with a buddy. Buddies shall assist workers who experience a malfunction as follows:

If one of the workers experiences a respirator malfunction, he/she shall signal this to their buddy. The buddy must immediately stop what he or she is doing to escort the employee to a

safe area where the employee can safely remove the Respirator. Individuals must not work alone wearing an SAR or SCBA.

4.9. IDLH Procedures

The following procedures shall be followed in any area with a potential for Immediately Dangerous to Life and Health (IDLH) conditions:

- Workers entering this area shall wear a pressure demand Supplied-Air Respirator (SAR)
- An appropriately trained and equipped standby employee or, when needed, more than one employee shall remain outside the IDLH atmosphere and maintain constant voice and visual communication with the employee
- In the event of an emergency requiring the standby person to enter the IDLH environment, the standby person shall immediately notify RPA and/or a supervisor prior to providing necessary assistance appropriate to the situation.
- For a Permit Required Confined Space, employees shall also comply with all relevant entry procedures as mandated by Federal and State regulations, and University policies and procedures.

4.10. Air Quality

Any department using SARs shall maintain a minimum air supply of one fully charged replacement cylinder for each SAR unit. For SARs, only Grade D breathing air shall be used in the cylinders. The vendor is required to certify that the air in the cylinders meet the specifications of Grade D breathing air. Compressed oxygen shall not be used in atmosphere-supplying respirators, including open circuit Self-Contained Breathing Apparatus (SCBA(s)) that have previously used compressed air. This is to prevent possible fires and explosions.

4.11. Cleaning

Respirators are to be regularly cleaned and disinfected. Respirators issued for the exclusive use of a single employee is the preferred procedure and is recommended by USO. Respirators shall be cleaned as often as necessary, but at least once a day if used continuously. Atmosphere supplying and emergency use respirators are to be cleaned, inspected and disinfected after each use.

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,
- Place in a clean, dry plastic bag or other air tight container.

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

4.12. Maintenance and Inspection

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 defeats. Worn or deteriorated parts will be replaced prior to use. No components will be replaced or repairs made beyond those recommended by the manufacturer. Repairs to regulators or alarms of atmosphere-supplying respirators will be conducted by a service agent licensed by the manufacturer of the SAR.

Inspection of the respirator must be conducted before every use. The following checklist will be used when inspecting respirators:

Facepiece: cracks, tears, or holes facemask distortion cracked or loose lenses/faceshield	**Valves:** residue or dirt cracks or tears in valve material	**Air Supply Systems:** breathing air quality/grade condition of supply hoses hose connections settings on regulators and valves
Headstraps: breaks or tears broken buckles	**Filters/Cartridges:** approval designation gaskets cracks or dents in housing proper cartridge for hazard	

Employees are permitted to leave their work area to perform limited maintenance on their respirator in a designated area that is free of respiratory hazards. Situations when this is permitted include to wash their face and respirator face piece to prevent any eye or skin irritation, to replace the filter, cartridge or canister, and if they detect vapor or gas breakthrough or leakage in the face piece or if they detect any other damage to the respirator or its components.

Repairs or adjustments to respirators are to be made only by persons appropriately trained to perform such operations and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator. Repairs shall be made according to the manufacturer's recommendations and specifications for the type and extent of repairs to be performed. and reducing and admission valves, regulators, and alarms will be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

4.13. Storage

Respirators must be stored so they are protected against damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and/or in accordance with the manufacturer's recommendations. The facepiece and exhalation valve must be stored in a manner that will prevent deformation. Each respirator should be positioned so that it retains its natural configuration. 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. Employees will have their name on the bag and that bag will only be used to store that employee's respirator.

Departments will store their supply of respirators and respirator components in their original manufacturer's packaging. Respirators intended for emergency use must be kept accessible to the work area, but not in an area that might itself be involved in the emergency because such an area may become contaminated or inaccessible.

4.14. Defective Respirators

Respirators that are defective or have defective parts shall be take out of service and given to the RPA. If, during an inspection, an employee discovers a defect in a respirator, he/she is to bring the defect to the attention of his or her supervisor. Supervisors will give all defective respirators to the RPA who 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 the USO.

4.15. Training

The Respirator Program Coordinator (RPC) will provide/coordinate training to respirator users and their supervisors on the contents of the Florida Tech Respiratory Protection Program and their responsibilities under it, and on 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 who must wear respirators.

The training course will cover the following topics:

- The Florida Tech Respiratory Protection Program
- The OSHA Respiratory Protection standard
- Proper selection and use of respirators
- Limitations of respirators
- Respirator donning and user seal (fit) checks
- Fit testing
- Emergency use procedures (if applicable)
- Maintenance and storage
- Medical signs and symptoms limiting the effective use of respirators

Employees will be retrained annually or as needed (e.g., if they change departments and need to use a different respirator). Employees must demonstrate their understanding of the topics covered in the training through hands-on exercises, i.e. correctly donning and doffing the respirator. Respirator training will be documented by the RPA and the documentation will include the type, model, and size of respirator for which each employee has been trained and fit tested.

5. Program Evaluation

The Respiratory Program Coordinator (RPC) will conduct periodic evaluations to ensure that the provisions of this program are being implemented. The evaluations will include regular consultations with employees and their supervisors (who use respirators), site inspections, air monitoring and a review of records.

Problems identified will be noted in an Inspection Log (maintained by University Safety Office) and addressed by the Respiratory Program Administrators (RPA). The findings will be forwarded to the relevant Deans, Department Chairs and RPAs. The report will also list the plans to correct deficiencies and the target date to re-inspection.

6. Documentation and Record Keeping

A written copy of Florida Tech Respirator Protection Program and the OSHA standard is kept in the University Safety Office and is available to all employees who wish to review it.

University Safety Office (USO) will maintain the copies of training and fit test records. These records will be updated as new employees are trained as existing employees receive refresher training, and as new fit tests are conducted. USO will also maintain copies of the medical clearance records for all employees covered under the respirator program. The completed medical questionnaire and documented findings are confidential and will remain with the appropriate medical practitioner. USO will only retain written recommendation regarding each employee's ability to wear a respirator. These records will be retained and available in accordance with 29 CFR 1910.1020. The medical record for each employee shall be preserved and maintained for at least the duration of employment plus (30) years.

References

[1] http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=12716

[2] http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_id=9780&p_table=STANDARDS

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