



Respiratory Protection Plan

Florida Institute of Technology (Florida Tech)

Environmental Health & Safety (EH&S)

150 W University Blvd, Melbourne, FL 32901

Email: ehs@fit.edu

Website: <https://www.fit.edu/office-of-environmental-health-and-safety/>

Contents

REVISION HISTORY	4
Purpose.....	5
Scope and Application	5
Definitions	6
Responsibilities.....	10
University Leadership (Deans and Department Chairs).....	10
Supervisors (Including PPs).....	10
Environmental Health & Safety Office (EH&S).....	11
Employees (Respirator Users)	11
Hazard Assessment.....	12
Initial Hazard Assessment & Selection.....	12
Respirator Selection.....	13
Respirator Type.....	13
Sourcing Respirators	13
Voluntarily Respirator Use	14
Medical Evaluation	15
Medical Evaluation Procedure.....	15
Medical Evaluation Procedure (Post Approval).....	16
FIT Testing.....	17
General Use Procedures	17
Respirator Malfunction	18
User Seal Checks.....	18
Extended Use & Reuse	20
Maintenance and Inspection	21
Repairs/Replacement Parts.....	21
Defective Respirators.....	21
Florida Tech Respiratory Protection Program	2

Respiratory Protection Program

Cleaning.....22

Training23

 Method & Content23

 Frequency.....23

 Elastomeric Half & Full-Face Respirators and PAPR Units.....23

Program Evaluation.....24

Record Keeping & Retention.....24

Reporting Concerns.....24

References25

Respiratory Protection Program**REVISION HISTORY**

Revision Number	Revision Date	Revised By	Description of Change
00	2019-09-17	Charles Cherrito	Initial plan creation and implementation.
01	2020-04-10	Charles Cherrito	Added extended use and reuse procedures.
02	2020-07-23	Charles Cherrito	Added verbiage to Voluntary Respirator Use section. Added Appendices A, B, C, and D.
03	2020-07-28	Charles Cherrito	Added more detailed section for extended use, training, and half & full-face usage. Added user seal check section.
04	2021-01-20	Charles Cherrito	Updated all supplemental and supporting forms/documents.
05	2021-11-17	Charles Cherrito	Periodic Review.

Respiratory Protection Program

PURPOSE

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

- o Protect Florida Tech employees and students from identified inhalation exposure & respiratory hazards (e.g. harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors).

- o Establish Florida Tech's written compliance as required by OSHA's Respiratory Protection Standard (29 CFR 1910.134).

The Florida Tech Respiratory Protection Plan 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 plan is updated annually to address the changing needs of the university along with federal regulatory revisions.

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

SCOPE AND APPLICATION

This document serves as a standard operating procedure (SOP) for all personnel who are required to wear a respirator during work & school assignments. Personnel *required* to participate 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 absorbed by the employing department or other university funds.

DEFINITIONS

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.

Note 1: half face respirators (including N95's) are APF-10.

Note 2: full face respirator systems that need to be classified at APF-50, must be fit tested using the qualitative procedure.

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.

Elastomeric Respirator

Elastomeric respirators, such as half facepiece or full facepiece tight-fitting respirators where the facepieces are made of synthetic or natural rubber material, can be repeatedly used, cleaned, disinfected, stored, and re-used.

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.

Respiratory Protection Program

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 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, also called CAPR, 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) An atmospheric concentration of any toxic, corrosive or asphyxiant substance that poses an immediate threat to life or would cause irreversible or delayed adverse health effects or would interfere with an individual's ability to escape from a dangerous atmosphere.

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 based on 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.

Respiratory Protection Program

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 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.

Respiratory Protection Program

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

RESPONSIBILITIES

University Leadership (Deans and Department Chairs)

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 regulations. Departments shall provide such equipment and supplies as are necessary to comply with such standards. Deans and Department Chairpersons have overall responsibility for implementation of the Respiratory Protection Program within their departments. They shall also bear the cost of respiratory protective equipment and maintenance as it is the department's responsibility to purchase the necessary respirator for their staff member.

Supervisors (Including PI's)

Supervisors are responsible for ensuring that the respiratory protection program is implemented in their specific areas and 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. They also must ensure individuals requiring respirator protection are enrolled in the Respiratory Protection Program and that they participate in the ongoing requirements. They may choose to designate an individual to coordinate with EH&S for the initial, annual, and periodic requirements (e.g. fit tests/medical evaluations). Duties of the supervisor include:

- Ensuring that employees under their supervision (including new hires) have received appropriate training, fit testing, and initial medical evaluation;
- Ensuring the availability of appropriate respirators and related 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;
- Ensuring that respirators fit well and do not cause discomfort;
- Continually monitor work areas and operations to identify respiratory hazards;
- Coordinating with the EH&S on how to address respiratory and related hazards.

Respiratory Protection Program

Environmental Health & Safety Office (EH&S)

The Respiratory Protection Program is administered through EH&S, who has authority to make the technical and administrative decisions necessary for program implementation. The Environmental, Health & Safety Director is the Program Administrator at Florida Tech. EH&S will:

- Monitor the overall workplace to determine potential employee exposure;
- Provide consultation and monitoring upon request to assist supervisors in determining respirator requirements;
- Consult with supervisors to select the best type of respirator for their purpose;
- Perform respirator fit tests as required (or coordinating such fit tests);
- Assist in training employees required to wear respirators;
- Conduct respirator audits to determine program effectiveness and regulatory compliance.

Employees (Respirator Users)

Employees are responsible for the following:

- Notifying their supervisor if they have concerns or questions regarding respirator use;
- Notifying their supervisor if they exhibit signs or symptoms of workplace exposure;
- Wearing the appropriate respiratory protective device when deemed necessary;
- Maintaining a facial surface consistent with a proper fit of the respiratory protective device;
- Performing routine care and preventive maintenance of their selected respirator;
- Guarding against damage to the respirator;
- Making their respirator available for inspections and during fit testing;
- Participating in medical evaluations 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 their supervisor;
- Complying with departmental standard operating procedures and other requirements specified in this plan;
- Completing all training required within the program.

Respiratory Protection Program

HAZARD ASSESSMENT
Initial Hazard Assessment & Selection

Hazard assessments determine if respiratory protection is required and if so, what type of respirators are to be utilized. When it's believed that respiratory protection "is" or "may" be needed, individuals shall contact the EH&S Office—this will initiate the assessment process.

A Hazard Assessment will be where inhalation hazards may be present in routine operations or during an emergency; and will involve surveying the workplace, reviewing process records, and interviewing EH&S personnel, supervisors, and employees (and if necessary, students). The assessment may include exposure monitoring to quantify potential exposures. If it is determined that respiratory protection is necessary, the individual(s) must continue enrollment into the Respiratory Protection Program.

Assessments must be re-evaluated when there is potential for exposure due to work process changes or the hazard changes.

Although not exclusive, below are examples of respirator use and their associated work activities:

Work Activity	Type of Respirator
Chemical Hazards	Half or Full-face Air-purifying Respirator (APR) SEE SPECIAL NOTE #1
Biological Hazards	N95 disposable or P100 disposable Powered Air-purifying Respirator (PAPR)
Other Particulates (e.g. Dust)	N95 disposable or P100 disposable Dust Mask (note: not considered a respirator)
Asbestos	Half or Full-face Air-purifying Respirator (APR) Powered Air-purifying Respirator (PAPR) Note: level 100 or better HEPA required by OSHA.
Pesticide Application	Half Face Air-purifying Respirator (APR) Powered Air-purifying Respirator (PAPR)
Emergency Response	Half or Full-face Air-purifying Respirator (APR) N95 disposable or P100 disposable Powered Air-purifying Respirator (PAPR) SEE SPECIAL NOTE #2

Respiratory Protection Program

❖ SPECIAL NOTE #1

Various chemical hazardous require specific cartridges to mitigate exposure; therefore, the respirator must be used with the appropriate cartridge (filter). Users can utilize the below references for guidance.

<https://www.cdc.gov/niosh/npg/nengapdx.html>

https://www.osha.gov/dts/shib/respiratory_protection_bulletin_2011.html

❖ SPECIAL NOTE #2

Florida Tech personnel will not respond to emergencies that involve oxygen-deficient environments. The university will utilize either an approved hazardous response vendor or the local fire department.

RESPIRATOR SELECTION

Respirator Type

The type of respirator system chosen will greatly depend on the hazards and risks involved. Employees desire to wear a respirator that is not recommended by EH&S, they may do so if ALL the following items are satisfied:

1. The respirator they desire to use offers the same or better protection against the specific hazard they are expected to be exposed to;
2. They have been granted permission from their supervisor;
3. A risk assessment indicates that the respirator will not pose an enhanced risk to the users' safety;

Sourcing Respirators

The vendor chosen to obtain respirator systems from is at the preveue of each department; however, they should consult with EH&S to ensure the company is considered a reputable manufacture and distribute.

No matter the provider, all respirators, filters, cartridges, and canisters, or any respiratory equipment, 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. Respiratory systems are not permitted to comprise of non-NIOSH approved parts. Additionally, NIOSH labelling must not be removed or defaced.

VOLUNTARILY RESPIRATOR USE

There may be instances when employees desire to wear respirators when respiratory protection is not required for the job task.

Procedure

The below outlines the procedures for voluntary use of respirators.

1. Before you desire to voluntary use any respirator, contact the EHS Office (ehs@fit.edu).
2. A Hazard Risk Assessment will be completed. This will allow EHS will evaluate as to whether the respiratory protection jeopardizes the health or safety of the employee. EHS will render a decision of approval or denial of voluntary use, denoting the specific reasons for any denial.
3. If Approved:
 - a. **Filtering Facepieces (Particulate Masks—e.g. N95's):**

The employee is provided the information in [Appendix D to Sec. 1910.134 of the OSHA Respiratory Protection Standards \(Information for Employees Using Respirators When Not Required Under the Standard\)](#). The employee acknowledges receipt and is not considered to be enrolled in the Respiratory Protection Program.
 - b. **Tight-fitting Respirator (e.g. Half-Face or Full-Face):**

Employees who wish to use a elastomeric tight-fitting respirator where such respirator use is not required are still considered voluntary users, however, in addition to being provided Appendix D, they will receive a medical evaluation and training at no cost to the employee.
4. If Denied:

Employees who are denied voluntary use will be explained the reason(s) and will not be permitted to wear a respirator voluntarily.

NOTE:

The employee's department may provide (although not required) or allow employees to provide their own respirators for voluntary use.

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 is to receive a medical evaluation before utilizing a respirator in the workplace. 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 or on a task requiring respirator use. All examinations and questionnaires are to remain confidential between the employee and the PLHCP.

Medical Evaluation Procedure

- The employee completes all required documents for a medical evaluation provided by EH&S. The questions will comprise of [Appendix C to Sec. 1910.134: OSHA Respirator Medical Evaluation Questionnaire](#).
- The employee submits all documents to Holzer Health Center (Florida Tech).
- Employees will be granted the opportunity to speak with a PLHCP about their evaluation; and they will be granted follow-up medical exams as required by the OSHA Respiratory Standard, and/or as deemed necessary by the PLHCP.
- The PLHCP will review the medical documents and render a decision of cleared or not cleared for respiratory use.
- The PLHCP will inform EH&S as to the employee's clearance status.

Medical Evaluation Procedure (Post Approval)

Throughout continued employment, if respiratory protection is still required, additional medical evaluations will be provided under the following circumstances:

1. 1910.134(e)(7)(i)
An employee reports medical signs or symptoms that are related to ability to use a respirator;
2. 1910.134(e)(7)(ii)
A physician or other licensed health care professional (PLHCP), supervisor, or the respirator program administrator informs the employer that an employee needs to be reevaluated;
3. 1910.134(e)(7)(iii)
Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee reevaluation; or
4. 1910.134(e)(7)(iv)
A change occurs in workplace conditions (e.g. physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.
5. The employee desires a medical evaluation.

Respiratory Protection Program

FIT TESTING

Fit testing is required for employees wearing respirators. 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 EH&S makes visual observations of changes in the employee's physical condition that could affect respirator fit (e.g. facial scarring, dental changes, cosmetic surgery). The employee may select a different respirator if they do not think the respirator fit is acceptable, even after passing the fit test (although, a fit test will also be required for the newly chosen respirator).

EH&S will perform fit tests either through Qualitative or Quantitative methods.

GENERAL USE PROCEDURES

Respirators 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 EH&S.

Properly don and doff respirators in a manner to not spread contamination or damage the unit (non-disposable units). Tutorial: [Appropriate Donning/Doffing Procedures](#)

Employees are 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;
- to wash their face and respirator face piece to prevent any eye or skin irritation;
- change filters, cartridges, or canisters
- replace parts;
- to inspect respirator if it stops functioning as intended;
- or if they detect vapor, gas breakthrough, leakage in the face piece, any other damage to the respirator, or its components;

RESPIRATOR MALFUNCTION

For any respirator malfunction (e.g., such as contaminant breakthrough, facepiece leakage, or improperly working valve), the user should go to a designated safe area to maintain, repair (basic repairs), or replace the respirator and inform their supervisor. The supervisor must ensure that the employee receives the needed parts to repair the respirator or is provided with a new respirator.

NOTE:

When referring to repairs above, this is relevance to basic repairs. For any repairs that may require technical knowledge, please see the “MAINTENANCE AND INSPECTION” section in this plan.

USER SEAL CHECKS

Performing a seal check is an important way to ensure you have a good seal between your face and the respirator (properly seated to the face)—which allows for optimal protection. All users shall conduct user seal checks each time that they wear their respirator. Users shall use either the positive or negative pressure check, or the respirator manufacturer's recommended user seal check. If the seal check test fails, the respirator must be readjusted and rechecked or another facepiece must be selected.

To conduct a positive pressure check:

- Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece without any evidence of outward leakage of air at the seal.
- For most respirators, this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve, and then carefully replacing it after the test.

To conduct a negative pressure check:

- Close off the inlet opening of the canister or cartridge(s) by covering it with the palm of the hand(s) or by replacing the filter seal(s).
- Inhale gently so that the facepiece collapses slightly and hold your breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand, which requires that the test be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove.
- If the facepiece remains in its slightly collapsed condition, and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

Manufacturer Seal Checks

The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures, provided that the employer demonstrates that the manufacturer's procedures are equally effective in detecting seal leakage compared to the positive pressure and negative pressure checks described above.

Special Note 1:

When using a respirator that has a metal strip that fits over the nose (commonly on N95's), be sure to carefully press the strip down to ensure that the nosepiece fits closely and provides a full seal.

Special Note 2:

Some disposable respirators, the exhalation valves are not designed for positive pressure user seal checks. If you wear a valved disposable respirator, you must conduct a negative pressure user seal check.

EXTENDED USE & REUSE

As an initial standard, Florida Tech will implement the procedure that all disposable respirators shall be discarded after each use. However, there may be times that this standard is subject to alternative measures (e.g. equipment shortage—examples similar to the events of the COVID-19 pandemic). In either event, Florida Tech will ensure that the OSHA’s General Duty Clause is utilized as a standard for continual respirator use of the same unit.

Under the guidance of authoritative entities (e.g. OSHA, CDC), there *may* be times for which respirators, particularly N95 units, are permitted to be utilized under extended circumstances, re-used, or used when expired. However, whenever respirators are contaminated and cannot be appropriately decontaminated without impacting the units’ integrity, has been soiled or damaged, they must be discarded, and a new unit used.

Extended Use (or Reuse)

If deemed acceptable by OSHA and in the event extended use or reuse of N95’s becomes necessary, the same worker is permitted to extend use of or reuse the respirator, as long as the respirator maintains its structural and functional integrity, and the filter material is not physically damaged, soiled, or contaminated (e.g., with blood, oil, paint).

Expired Use of N95’s

If N95s are not available, and Florida Tech has shown a good faith effort to acquire appropriate respirators or to use alternative options, every effort will be made to exercise discretion for the use of N95’s beyond the manufacturer’s recommended shelf life, including surgical N95s, so long as it does not violate applicable regulations.

MAINTENANCE AND INSPECTION

Respirators shall always be properly maintained to ensure that they function properly and adequately protect the employee. Maintenance involves a thorough visual inspection for cleanliness and defects.

Inspections

Respirator inspection must be conducted before every use. The following checklist is recommended when inspecting respirators:

- ✓ **Facepiece**
cracks, tears, or holes facemask distortion cracked or loose lenses/face shield
- ✓ **Valves**
residue or dirt cracks or tears in valve material
- ✓ **Air Supply Systems**
breathing air quality/grade condition of supply hoses connections
- ✓ **Head Strap**
breaks or tears broken buckles
- ✓ **Filters/Cartridges**
approval designation gaskets cracks or dents in housing proper cartridge for hazard

Repairs/Replacement Parts

Worn or deteriorated parts shall be replaced prior to use. No components will be replaced, or repairs made beyond those recommended by the manufacturer. 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. All repairs will be conducted by the manufacturer or an appropriately qualified vendor.

Defective Respirators

Respirators that are defective or have defective parts shall be taken out of service. If, during an inspection, an employee discovers a defect in a respirator, they shall bring the defect to the attention of their supervisor. Supervisors 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, the respirator will be tagged out of service, and the employee will be given a replacement of the same make, model, and size.

Respiratory Protection Program

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 EH&S. Atmosphere supplying, and emergency use respirators are to be cleaned and disinfected after each use. The following procedure is recommended:

- 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 airtight container.

Storage

Respirators must be stored so they are protected against damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, 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.

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.

TRAINING

Method & Content

EH&S will provide training to all respirator users. The training may be online, in-person, by document, or may include a combination of all methods. In either method, it will include the type, model, and size of respirator for which each employee has been assigned and fit tested.

Various topics will be covered in the training. These include:

- ✓ The Florida Tech Respiratory Protection Program/Plan
- ✓ The OSHA Respiratory Protection Standard
- ✓ Selection, Use, and Maintenance
- ✓ Limitations of Respirators
- ✓ Donning and Doffing
- ✓ Fit Testing

Frequency

Workers must be trained prior to using a respirator in the workplace. Employees will be retrained annually at minimum and more often, as needed (e.g., if they need to use a different respirator or the employee's non-compliance warrant re-training). During fit-testing, employees must demonstrate their understanding of the topics covered in the training through hands-on exercises (e.g. correctly donning and doffing the respirator).

Elastomeric Half & Full-Face Respirators and PAPR Units

For employees utilizing Elastomeric Half & Full-Face respirators and PAPR units, additional training will be provided in the form of in-person and supplemental documentation.

Respiratory Protection Program

PROGRAM EVALUATION

The Respiratory Program (Plan) will be reviewed annually, at minimum, by EHS, to ensure that the provisions of this program are being implemented. The evaluations may include this plan's review, regular consultations with employees and their supervisors (who use respirators), site inspections, air monitoring, and/or a review of other applicable records. Additionally, the program will be re-evaluated given any environmental circumstances that may change workplace hazards (e.g. pandemics).

Problems identified during any evaluation will be addressed and changes made in this plan, if necessary. Whenever changes are made to this plan that impact employee safety or understanding as it relates to respirator use, all applicable users will be notified.

RECORD KEEPING & RETENTION

A written copy of Florida Tech Respirator Protection Plan and the OSHA Standard are kept in the EH&S Office and online (for review and download) to be made available to all employees who wish to review it.

EH&S will maintain the copies of hazard assessments, training, and fit test records. EH&S will also maintain copies of the Medical Clearance Records for all employees covered under the respirator program.

The completed Medical Evaluation Questionnaires and documented findings are confidential and will remain with the appropriate medical professional. Records will be retained and available in accordance with 29CFR1910.1020.

Records for each employee shall be preserved and maintained for at least the duration of employment, plus 30-years.

REPORTING CONCERNS

When damage, misuse, or other concerns are discovered regarding yours or any respirator, immediately stop use of the unit and report the concerns to your supervisor.

REFERENCES

1. [OSHA's Respiratory Protection Standard \(29CFR1910.134\)](#)
2. [OSHA Respiratory Protection Standards Guide](#)
3. [Respiratory Protection Frequently Asked Questions](#)
4. [National Institute for Occupational Health and Safety \(NIOSH\) 42CFR84](#)
5. [Respiratory Protection Standard for M. Tuberculosis \(29CFR1910.139\)](#)
6. [Immediately Dangerous to Life or Health \(IDLH\) Values](#)
7. [General Respiratory Protection Guidance for Employers and Workers](#)
8. [Respirator Selection Guide](#)