

# University of Louisville

## Department of Environmental Health & Safety

### Respiratory Protection Program 2021

Date	Item	Purpose
2020	UofL Respiratory Protection Program	Updated/revised for procedural facility, personnel, and OSHA requirements
2021	Respiratory Program Review	Stakeholder group review revised draft and program

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## 1.0 PURPOSE

The purpose of this program is to establish procedures for the identification of hazards, use and maintenance of respiratory protection at the University of Louisville facilities, and to protect faculty and staff. Students using respiratory protection must consult with their supervisor, teaching faculty or Campus Health. Established procedures are compliant with OSHA 29 CFR 1910.134 Respiratory Protection Standard. This program will be available for review by all employees using respiratory protection.

## 2.0 SCOPE

This program only applies to NIOSH approved respirators. This program applies to University of Louisville faculty, staff, and students who are required to wear respirators during normal work operations, non-routine or emergency operations while on U of L owned property and/or worksites, while traveling and working at remote locations. The program also covers the voluntary use of respiratory protection.

This program establishes procedures to identify respiratory hazards that are present or likely to be present in the workplace including laboratories. It covers monitoring, selection, use, limitations, maintenance and disposal of respiratory protection. It also includes medical qualification, training and recordkeeping requirements.

## 3.0 DEFINITIONS

**ACGIH** - American Conference of Governmental Industrial Hygienists.

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

**Annually** – Every twelve (12) months.

**DEHS** – Department of Environmental Health and Safety.

**Dust Mask** – See **filtering facepiece**.

**Filtering facepiece (dust mask)** - 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. This would include N95 and NIOSH approved respirators. This does not include surgical masks.

**Fit test** - 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.)

**IDLH – Immediately dangerous to life or health** - 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.

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

**NIOSH** – National Institute of Occupational Safety and Health

**Oxygen deficient atmosphere** - An atmosphere with an oxygen content below 19.5% by volume.

**PEL** - Permissible Exposure Limits are established by OSHA Permissible Exposure Limits.

**PLHCP** - Physician or other licensed health care professional is an individual 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 this program.

**PI** - Principal Investigator

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

**PPE** - Personal protective equipment including respiratory protection

**Program Administrator** – Person responsible for program administration.

**Qualitative fit test (QLFT)** - 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)** - An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

**Respirator** – Any tight-fitting respirator, including- An atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

**Respiratory inlet covering** - 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.

**Respirator user** – Any faculty, staff, or student that is required or voluntarily wears a respirator

**Self-Contained Breathing Apparatus (SCBA)** – A tight fitting respirator where the air supply is carried by the user.

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

**Surgical Mask** – A mask designed to catch the bacteria shed in liquid droplets and aerosols from the wearer's mouth and nose. They are not designed to protect the wearer from inhaling airborne bacteria or virus particles and are less effective than respirators, such as N95 or NIOSH approved mask.

**Supplied-air respirator (SAR) or airline respirator** – A respirator where the source of breathing air is not designed to be carried by the user.

**Tight-fitting facepiece** - A respiratory inlet covering that forms a complete seal with the face. This includes filtering-facepiece types and/or tight-fitting air-purifying respirators (APR's), powered air-purifying respirators (PAPRs), air-supplying respirators (ASR), and self-contained breathing apparatus (SCBA).

**TLV** - Threshold Limit Values

**Voluntary use** – Choice to wear respiratory protection when use is not required.

## 4.0 RESPONSIBILITIES

### 4.1 The Department of Environmental Health and Safety will:

- Designate the Respiratory Protection Program Administrator
- Provide resources for training and fit-testing and maintain documentation
- Develop, implement and update the written Respiratory Protection Program
- Coordinate workplace Hazard Assessments to identify potential and actual respiratory hazards
- Conduct monitoring as needed to determine exposure levels
- Assist Departments and Centers in the implementation of the program for their areas
- Provide guidance in the selection and use of respiratory protection
- Conduct and document fit testing
- Develop and provide training
- Coordinate with Campus Health supervisors and employees to facilitate medical evaluations
- Document annual program evaluation
- Conduct program compliance surveys
- Develop recommendations as needed from program evaluation and surveys

### 4.2 Departments and Centers will:

- Provide resources to implement area specific programs
- Assign respiratory responsibility to a Supervisor or PI
- Provide respirators, cartridges and other needed equipment

### 4.3 Supervisors or PI will:

- Contact DEHS to coordinate and document a Hazard Assessment to identify:
  - respiratory hazards used or generated in their work area
  - employees that may be exposed to these hazards
  - tasks or jobs requiring respiratory protection
- Ensure employees are enrolled in a Medical Surveillance Program
- Schedule and allow employees the opportunity to complete initial and annual:
  - medical evaluations
  - fit testing
  - training
- Furnish Campus Health Services or other health care providers with specific information to be used in determining the employee's ability to use a respirator.
- Provide appropriate respiratory protection and supplies.
- Ensure employees:
  - Maintain, replace & dispose of damaged respiratory protection
  - select and use the appropriate respiratory protection
  - properly use, clean, store and maintain their respiratory protection
  - Complete initial, annual or as needed medical evaluations, fit testing and training
- Notify the appropriate contact with concerns or changes to hazards occur:
  - Contact either your Program Administrator, Biosafety office, or PI
- Consult with DEHS to obtain [Voluntary Use Form](#) documentation and send to DEHS
- Ensure training, fit testing, and hazard assessment documentation are appropriately maintained

#### 4.4 Respirator Users will:

- Complete the following prior to using respiratory protection:
  - complete [medical questionnaire](#) and medical evaluation if requested by physician
  - fit testing
  - training
- Maintain and replace damaged respiratory protection
- Select and wear the appropriate respiratory protection as instructed and trained
- Properly use, clean, store, maintain and dispose of their respiratory protection
- Complete initial, annual or as needed medical evaluations, fit testing and training
- Wear only the type, brand and size of respirator(s) fitted during fit testing
- Inspect respiratory protection before and after each use
- Conduct respirator Fit-Checks each time the respirator is worn
- Follow manufacture guidelines for selection, maintenance and limitations
- Report to supervisor or PI any damage or malfunction of the respirator
- Report to supervisor or PI any signs, symptoms or difficulty related to respirator use
- Consult with your supervisor or PI prior to using a respirator that is voluntary
- Ensure documentation is given to responsible parties

#### 4.5 Campus Health or other Licensed Health Care Provider will:

- Provide medical questionnaires according to regulatory requirements
- Complete medical evaluations according to regulatory requirements
- Provide copies of test results to respirator user and supervisor or PI
- Provide written recommendation on employees' ability to use a respirator
- Provide follow-up medical examination as needed
- Maintain all medical records as required by the standard

*U of L Campus Health Services (502-852-6479) can provide the medical evaluations.*

## 5.0 PROCEDURE

### 5.1 General requirements

Whenever feasible, hazards should be eliminated through engineering control measures (for example, enclosures or confinement of the operation, general and local ventilation, and substitution of less toxic materials). PPE is always the last line of protection. In some work environments PPE must be provided and used to protect personnel against hazards capable of causing injury, illness, or impairment.

PPE will be provided and used in the following circumstances:

- Where it has been determined that adequate engineering, and/or administrative controls do not reduce exposure potential to a safe level
- Where development or installation of engineering controls are pending
- Where it has been determined that PPE is necessary to protect the health and safety of employees
- During short term, non-routine operations for which engineering controls are not practical

- During emergency situations such as spills, ventilation malfunctions, damage control activities, etc.

## **5.2 Hazard Assessment**

If an employee believes that respiratory protection is needed during a particular task or when working with a specific material, they should contact DEHS to request that a Hazard Assessment be completed. The University of Louisville PPE Hazard Assessment form (PPE Program) will be used to document the assessment. The assessment will identify and evaluate the respiratory hazards. The IBC review process and risk assessment will satisfy the requirement for hazard assessment.

The evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state, biological hazard, and physical form. Where the Program Administrator cannot identify or estimate the employee exposure, it will be considered an IDLH atmosphere.

A more in-depth exposure evaluation may be conducted, if needed, to determine exposure level by a third party. These evaluations would be coordinated by DEHS. DEHS will use Permissible Exposure Limits (PELs) established by OSHA or American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Values (TLV's) for guidance. Results of these evaluations will be reported to the supervisor or PI as well as the affected employees.

Assessments will be revised whenever there are changes in the workplace conditions, hazards, materials, or operations.

## **5.3 Required**

### Use of Respirators

Any respirator user who is required to wear a tight-fitting respirator must follow all the requirements of this program. This includes medical evaluation, fit-testing, training, cleaning, maintenance, and storage requirements of this program. Respirators will be selected that are NIOSH certified and adequate to protect the health of the user.

Where there are non-IDLH (not Immediately Dangerous to Life or Health) atmospheres, appropriate respirators will be selected. Respirators will be NIOSH certified and adequate to protect against the specific hazard(s) under routine and foreseeable emergencies.

Respiratory protection may also be provided for substances not regulated by OSHA, but may be of concern due to their toxicity (i.e. hazardous substances used in research, infectious agents, cytotoxic or other hazardous drugs).

## **5.4 Voluntary Use of Respirators**

Employees may choose to voluntarily use respirators in situations where the potential exposure levels are below the exposure limit. Employees may also choose to use respirators in the presence of nuisance materials or by personal choice. If they do, they must follow the University's procedure for voluntary use that includes:

- Respiratory Protection Program Administrator review
- Read and follow all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirator's limitations.

- Choose respirators certified for use to protect against the contaminant of concern. Use NIOSH certified respirators. A label or statement of certification should appear on the respirator or respirator packaging indicating what the respirator is designed for and the level of protection.
- 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.
- Keep track of your respirator so that you do not mistakenly use someone else's respirator.

#### Voluntary Use Filtering-Facepiece (N95 Respirator)

Any respirator user who is approved for voluntary use of a filtering- facepiece for comfort or nuisance level protection, is NOT subject to the medical evaluation and fit-testing requirements of this program. It does require the user to review the provisions of the [Information for Employees for Voluntary Use of Respirators](#). These documents will be tracked and verified by DEHS/PI's. It is the responsibility of supervisors and PI's to ensure all employees using voluntary use respirators have completed this document.

#### Voluntary Respirator Use – Any Other Tight-Fitting Facepiece

Respirator users who are approved for voluntary respirator use of any other type of tight-fitting respiratory protection are subject to the medical evaluation provisions, fit testing and other required elements of this respiratory protection program.

#### Voluntary Respirator Use – Loose-Fitting Facepiece Respirators (including PAPR's)

Respirator users who are approved for voluntary respirator use of any loose-fitting types of respirators, such as PAPR helmet or hood style respirators, are NOT required to receive medical evaluation, and respirator fit-testing, but are required to receive training in the limitations, proper use, cleaning/ maintenance, and storage of respirators.

### **5.5 IDLH Atmosphere Respirator Use**

*The University does not allow an employee or student entry into immediately dangerous to life or health (IDLH) atmosphere.*

*All oxygen-deficient atmospheres shall be considered IDLH.*

*Air-purifying respirator can never be worn an IDLH atmosphere.*

This section does not apply to firefighters or emergency responders.

### **5.6 Medical Evaluation**

The use of respiratory protection may impose an additional physiological stress on the body. Because of this the respirator users who are required to wear tight-fitting respirators must first complete and pass a medical evaluation.

Medical evaluations are not required for the voluntary use of filtering facepiece respirators (dust masks/ N95s). Users are not permitted to obtain or wear tight-fitting respirators until a Physician or other licensed health care professional has determined that they are medically fit to use the respirator.



Anyone refusing to complete the medical evaluation will not be allowed to work in an area where respiratory protection is required.

Medical evaluation procedures are as follows:

- A [Medical Evaluation Questionnaire](#) must first be completed by the respirator user and given to U of L Health Services Office for review. The questionnaire is based on information requirements established by OSHA and must be kept confidential.
- Medical evaluations will be completed by a PLHCP.
- Additional or further medical evaluations shall be conducted in accordance with the OSHA regulations. Examples of this include, but are not limited to:
  - o Employee reports medical signs or symptoms that are related to ability to use a respirator
  - o 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.
- All respirator users will be given the opportunity to speak with the medical professional about their medical evaluation. They will be scheduled by their supervisor or PI at no cost to the user during normal business hours.

The PLHCP shall be provided with:

- a copy of the OSHA respirator standard
- a copy of this program by DEHS upon request
- hazardous substances that employees may be exposed to
- work area, location and job title
- respirator type and weight
- length of time required to wear the respirator
- expected physical workload (light, moderate or heavy)
- additional PPE expected to be worn
- Potential temperature and humidity extremes and additional protective clothing required.

Once the user has passed the medical evaluation, a fit test will be scheduled and completed.

### **5.7 Fit Testing**

Fit testing will be conducted once employees are given a copy of the employees signed Medical Qualification for Respirator Use. Fit testing will follow regulatory requirements and is mandatory when users are required to wear a tight-fitting respirator or filtering facepiece (Dust Mask) but is not required for the voluntary use of filtering facepieces (dust masks). Fit testing will be scheduled by the Supervisor, PI, employee or student.

It is preferred that testing is conducted by DEHS, however, other provider(s) may be used if they furnish documentation showing their procedures comply with the OSHA Respiratory Protection Standard for Fit Testing. A copy of the fit test record and procedure must be forwarded to DEHS prior to employee or student respirator use.

Fit testing must be conducted:

- Initially before a respirator is provided or used in the workplace
- Annually if respirators are required

- Whenever a user changes type of tight-fitting respirator (e.g. different size, make, model or type)
- When there are changes in the employee's physical condition that could affect the respirator fit (e.g. an obvious change in body weight, facial scarring, extensive dental work, or cosmetic surgery) either reported by the employee, observed by the employee's supervisor, PLHCP or the Program Administrator.
- When the user reports that their respirator does not fit properly (e.g. smelling a contaminant while wearing the respirator with new cartridges, hearing or feeling air leaking around the facepiece).

Users will be provided with a sufficient number of respirator models and sizes to select from to allow for proper fit. They must be fitted for the specific brand, model and size for each respirator they are required to wear.

If the user finds the fit of the respirator unacceptable or a good fit is not achieved, they will be given an opportunity to select a different respirator and be retested. If an acceptable fit still is not achieved with one of the above respirators, additional brands and sizes may be tried. If no suitable respirator can be found the user will not be permitted to work in an area where respirators are required

The University shall use either Quantitative or Qualitative fit test methods. Testing will follow regulatory requirements. Quantitative fit testing is a method of measuring the amount of leakage into a respirator. It is a numeric assessment of how well a respirator fits a particular individual. Qualitative fit testing is a non-numeric pass/fail test that relies on the respirator wearer's response to a test agent to determine respirator fit. Quantitative fit testing shall be used for full facepiece respirators. Both tests are administered using OSHA accepted protocols and procedures.

Fit testing records shall include:

- The name or identification of the employee tested
- Type of fit test performed
- Specific make, model, style, and size of respirator tested
- Date of test
- The pass/fail results for QLFTs or the fit factor and strip chart recording or other recording of the test results for QNFTs

### **5.8 Respirator Selection**

Hazards or potential hazards are identified during the assessment will be used to determine the type of respirator to be selected and worn. Respirator cartridges will be selected based on the specific hazard. SDS can be used to determine proper respiratory protection for chemical protection. The [Biosafety Manual identifies](#) proper respiratory protection for specific biological hazard exposures. The user should select properly fitting respiratory protection. Only NIOSH certified respirators will be used.

### **5.9 Use of Respirators**

Respirators may not be worn when any condition exists that may result in facepiece seal leakage. Respirators with tight-fitting facepieces will not be worn by users who have:

- Facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function; or
- Any condition that interferes with the face-to-facepiece seal or valve function.

If a user wears corrective glasses or goggles or other personal protective equipment, the equipment must be worn in a manner that does not interfere with the seal of the facepiece to the user's face.

Users wearing a tight-fitting respirator shall perform a seal check each time the respirator is worn. This is conducted by performing a negative and positive pressure check. A negative pressure check is completed by:

- Covering respirator inlets with the palms (cartridges, canisters or filters)
- Gently inhaling
- Holding your breath for 10 seconds
- The facepiece should collapse on the workers face and remain collapsed

For a positive pressure check is completed by:

- Covering the respirator exhalation valve with the palms
- Gently exhaling into the facepiece
- The facepiece should hold the positive pressure for a few seconds
- During the test, the user should not hear or feel the air leaking from the facepiece seal

Respirator users must not remove respirators in hazardous environments.

#### **5.10 Continuing Respirator Effectiveness**

Appropriate surveillance shall be maintained of work area conditions and degree of employee exposure or stress. When there is a change in work area conditions or degree of employee exposure or stress that may affect respirator effectiveness, the employer shall reevaluate the continued effectiveness of the respirator.

Users shall leave the respirator use area:

- to wash their faces and respirator facepieces as necessary to prevent eye or skin irritation associated with respirator use
- if they detect vapor or gas breakthrough
- changes in breathing resistance
- leakage of the facepiece
- to replace the respirator or the filter, cartridge, or canister elements

#### **5.11 Types of Respirator Facepieces**

The degree of protection offered by a respirator and its acceptability by workers varies according to facepiece style. Respirator facepieces may be tight fitting, half mask or full facepiece, or loose fitting hood or helmet.

**Tight Fitting Respirators:** Tight fitting respirators include both half mask and full facepiece models that rely on the face-to-facepiece seal for adequate protection. They cannot be used when facial hair or other conditions interfere with this seal. Fit testing is required before an employee is assigned a respirator with tight fitting facepiece. Tight fitting respirators may be either negative pressure APR's or PAPR's.

**Loose Fitting Respirators:** Loose fitting respirators are powered air purifying units that deliver purified air to a hood, helmet or other loose-fitting face covering. They may be used by employees with facial

hair or other conditions that might prohibit a good face-to-facepiece seal. Fit testing is not required for loose fitting respirators.

## **5.12 Maintenance and Care of Respirators**

### **Cleaning and Disinfecting**

Respirators must be cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

Respirators must be cleaned and disinfected at the following intervals:

- Individually assigned respirators will be cleaned by the user as often as necessary to keep them in a clean and sanitary condition
- Respirators that may be worn by more than one user will be cleaned and disinfected before being worn by different individuals
- Respirators for emergency use will be cleaned and disinfected after each use
- Respirators used for fit testing and training will be cleaned and disinfected after each use

### **Respirator Cleaning Procedures**

The following procedures must be followed when cleaning respirators:

- Remove filters, cartridges, or canisters.
- Disassemble facepieces by removing speaking diaphragms, demand and pressure- demand valve assemblies, hoses, or any components recommended by the manufacturer.
- Discard or repair any defective parts.
- Wash components in warm water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle brush may be used to facilitate the removal of dirt.
- Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water.
- Drain.
- When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
  - 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,
  - 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);
  - Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
- 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 facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.
- Components should be hand-dried with a clean lint-free cloth or air-dried.
- Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.
- Test the respirator to ensure that all components work properly.

## **5.13 Storage**

Respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. Cleaned respirators should be placed in re-sealable plastic bags for storage. They shall be packed or stored to prevent deformation of the facepiece and exhalation valve maintained in a sanitary and serviceable condition.

In addition, emergency respirators shall be:

- Kept accessible to the work area
- Stored in compartments or in covers that are clearly marked as containing emergency respirators
- Stored in accordance with any applicable manufacturer instructions

#### **5.14 Inspection**

The users shall inspect the following before each use and during cleaning:

- A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the facepiece, head straps, valves, connecting tube, and cartridges, canisters or filters; and
- A check of elastomeric parts for pliability and signs of deterioration.

#### **5.15 Repairs**

Respirators that fail an inspection or are otherwise found to be defective must be removed from service, and are discarded or repaired or adjusted in accordance with the following procedures:

- 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.
- Reducing and admission valves, regulators, and alarms shall be adjusted or repaired only by the manufacturer or a technician trained by the manufacturer.

#### **5.16 Cartridges**

Filters, cartridges and canisters used in the workplace are labeled and color coded with the NIOSH approval label. The label must not be removed and must remain legible.

#### **5.17 Program Evaluation**

DEHS will conduct and document annual evaluations of the workplace to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective. Program will be revised whenever there are changes in the workplace conditions, hazards, materials or operations. DEHS and the supervisor or PI will periodically consult employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems that are identified during this assessment shall be corrected. The following minimum items must be assessed:

- Respirator fit (including the ability to use the respirator without interfering with effective workplace performance)
- Appropriate respirator selection for the hazards to which the employee is exposed
- Proper respirator use under the workplace conditions the employee encounters
- Proper respirator maintenance.

The annual review and evaluation will be documented using the cover page of this program.

All findings and observations will be documented. Corrective actions will be assigned and tracked to closure. Closure will be documented.

## **6.0 TRAINING**

Training will be provided prior to requiring the employee to use a respirator in the workplace. Retraining will be provided annually. The trainee will demonstrate knowledge of the topics being covered.

Training will cover following topics:

- Why the respirator is necessary
- Hazards present in the area
- Procedures for obtaining Medical Evaluation, including how to obtain follow-up as necessary
- how improper fit, usage, or maintenance can compromise the protective effect of the respirator
- limitations and capabilities of the respirator
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions
- how to inspect, put on and remove, use, and check the seals of the respirator
- proper care, maintenance and storage of the respirator
- how to recognize medical signs and symptoms that may limit or prevent the effective use of respirators
- general requirements of the respiratory protection program

### **6.1 Voluntary Use**

Employees who choose to voluntarily wear a respirator must review the document, "[Information for Employees Using Respirators When Not Required under the Standard](#)." The document must be signed and dated by the employee, indicating the employee has received and understands the information. The supervisor must obtain this documentation and send to DEHS.

When filtering facepiece respirators are freely available to employees to use on a voluntary basis, the supervisor or PI must ensure all affected employees receive this training.

### **6.2 Supervisor and PI**

Anyone that oversees the work activities of respirator users must have a fundamental knowledge of respirators and Universities respiratory protection program. Their training will include at least the following:

- The fundamentals of respiratory protection
- University's respiratory protection program
- Types and extent of the hazards to which employees may be exposed
- The selection and use of respirators used by employees
- Employee's responsibilities

Retraining will be completed whenever there:

- is reasonable believe that a trained employee did not understand previous training
- are inadequacies in an employee's knowledge or use of assigned respirator

- are changes in workplace hazards
- are changes in the type of respirator used

## 7.0 REFERENCES

### **29 CFR 1910.134 Respiratory Protection**

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134>

### **Appendix A to § 1910.134: Fit Testing Procedures (Mandatory)**

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppA>

### **Appendix B-1 to § 1910.134: User Seal Check Procedures (Mandatory)**

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppB1>

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

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppB2>

### **Access to Employee Exposure and Medical Records**

<https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1020>

**OSHA Appendix D to Sec. 1910.134 (Mandatory)**

**Information for Employees Using Respirators When Not Required Under the Standard**

**IMPORTANT: DEHS PPE Assessment form must be completed and signed by PI or Supervisor for specific activity. Voluntary use is *only* permitted when your employer has determined that there is no airborne hazard that would *require* the use of a respirator.**

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 respirator's 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.

(Please Print)

Workplace Specific Activity ( <i>Less than 6 ft social distance during teaching and instruction in lab setting</i> )	
Employee Name and Date	
Department	
Responsible Supervisor	
Employee Signature	

Email copy of this completed and signed form to [dehsih@louisville.edu](mailto:dehsih@louisville.edu)

If you have any questions about this form, or the use of respirators please contact your PI or supervisor or the UofL Respiratory Protection Program Administrator at 852-6670.