**Respiratory Protection Program UPPS No. 04.05.19**

**Issue No. 1**

**Effective Date: 04/01/2022**

**Next Review Date: 02/01/2025 (E3Y)**

**Sr. Reviewer: Director, Environmental, Health, Safety, Risk and Emergency Management**

**POLICY STATEMENT**

*Texas State University is committed to maintaining compliance with mandatory health regulations.*

**01. SCOPE**

01.01 This document establishes policies and procedures for the Respiratory Protection Program at Texas State University.

**02. GENERAL**

02.01 The health and safety of Texas State employees is of utmost importance. Reflecting this concern, the university will enforce proactive standards to ensure the protection of all individuals from potential hazards through the proper use of respirators. Respirators shall be used:

a. when engineering controls of respiratory hazards are not feasible;

b. while engineering controls are being instituted; and

c. during emergencies.

02.02 Only state and licensed asbestos workers are allowed to disturb asbestos-containing material. University employees are subject to the Respiratory Protection Program.

**03. DEFINITIONS**

* 1. 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.
	2. Fit Test – a protocol to evaluate the qualitatively or quantitatively fit of a tight-fitting respirator on an individual.
	3. 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.
	4. Oxygen Deficient Atmosphere – an atmosphere with an oxygen content below 19.5 percent by volume.
	5. Physician or Other Licensed Health Care Professional (PLHCP) – an individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows them to independently provide, or be delegated the responsibility to provide, some or all the health care services (medical evaluation, follow-up, medical questionnaire, and examinations).
	6. Positive Pressure Respirator – a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.
	7. 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.
	8. Pulmonary Function Test and Spirometry Test – noninvasive tests that show how well the lungs are working. The tests measure lung volume, capacity, and rates of flow. This information can help determine if the employee is medically fit to wear a respirator.
	9. Qualitative Fit Test (QLFT) – a pass or fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.
	10. Quantitative Fit Test (QNFT) – an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.
	11. Self-Contained Breathing Apparatus (SCBA) – an atmosphere supplying respirator for which the breathing air source is designed to be carried by the user.
	12. User Seal Check – an action conducted by the employee to determine if the respirator is properly seated to the face.

**04. RESPONSIBILITIES**

04.01 Texas State is responsible for providing respirators at no cost to employees when necessary. Expenses associated with the program such as, training, medical evaluations, and equipment will be paid for by the university.

04.02 Environmental, Health, Safety, Risk and Emergency Management (EHSREM) will assign a program administrator who will administer the Respiratory Protection Program. Duties will include:

1. identifying areas, processes, or tasks that require employees to wear respirators;
2. evaluating hazards;
3. assisting in selecting appropriate respiratory protection options;
4. monitoring respirator use to ensure that respirators are used in accordance with their specifications;
5. arranging for or conducting respirator training;
6. arranging periodic physical exams;
7. ensuring proper storage and maintenance of respiratory protection equipment;
8. arranging fit testing;
9. evaluating the program; and
10. updating written program, as needed.

04.03 Supervisors and principal investigators are responsible for ensuring that the following procedures are followed:

1. notifying the EHSREM Management Office or program administrator of its employees’ participation in the Respiratory Protection Program;
2. ensuring that their employees have received appropriate training, fit testing, and annual medical evaluations;
3. purchasing and maintaining respirators for their employees;
4. properly storing respirators after use;
5. maintaining an adequate inventory of appropriate respirator filters for employees; and
6. optional – maintaining cartridges or filter replacements.

04.04 Employees must take responsibility for their own safety and make a firm commitment to follow the procedures of the Respiratory Protection Program. Employees must:

* + 1. participate in medical clearance procedures, training sessions, and fit tests;
		2. care for and maintain their respirators as instructed, protect them from getting damaged, and store them in a clean, sanitary location;
		3. inform their supervisor if their respirator no longer fits well and request a new one that fits properly. New respirators will need to be fit tested;
		4. inform their supervisor of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding this program;
		5. use the respirator in accordance with the manufacturer’s instructions and the training received; and
		6. use the respirator make and model that they have been cleared to use.

04.05 Texas State expressly authorizes a supervisor to halt any work project where there is danger of hazards including respiratory hazards.

**05. PROGRAM ELEMENTS**

05.01 A written plan explaining how the Respiratory Protection Program will be administered.

05.02 Workplace assessment.

05.03 Procedures and equipment to control respiratory hazards, including the use of engineering controls and work practices designed to limit or reduce employee exposures to such hazards.

05.04 Respirator selection guidelines based on workplace hazards to which the worker is exposed. This also includes selection of filters and cartridges.

05.05 Training program covering hazards recognition, respiratory hazard dangers, and proper care and use of respiratory protective equipment.

05.06 Respirator maintenance and care procedures.

05.07 Employee medical surveillance.

**06. USER REQUIREMENT PROCEDURES**

06.01 Initial User Clearance

 A PLHCP in the Student Health Center shall work in partnership with the program administrator to determine if employees are medically fit to wear a respirator. Employees shall not be permitted to wear a respirator until the PLHCP has determined that they are medically fit to wear one.

06.02 Medical evaluation procedures are as follows:

1. The employee will fill out a confidential medical evaluation questionnaire. The questionnaire will be based on the questionnaire included in [Appendix C of the OSHA Respiratory Protection Standard 1910.134](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppC). Medical questionnaires will be completed annually.
2. Employees who are unable to read the questionnaire will be provided assistance or will be sent directly to the PLHCP for medical evaluation.
3. The form will be provided to the employee to be filled out on company time to have ready for review by the PLHCP.
4. The PLHCP will determine whether the employee is approved for respirator fit testing or may require a follow up exam. The exam may include a physical exam, spirometry, chest x-ray, or further evaluation by the employee’s primary care provider or a specialist.

06.03 Fit testing requirements:

1. must be performed after receiving medical clearance.
2. must be performed annually.
3. must be performed when the employee reports, the employer, the PLHCP, or the supervisor or program administrator notices visual 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.
4. must not be conducted if there is any hair growth between the skin and the face piece sealing surface. Hair growth is stubble beard growth, beard, mustache, or sideburns that cross the respirator sealing surface.
5. must use one of the fit test methods:
6. QLFT – a respirator user is exposed to a harmless irritant smoke or odorous vapor while performing exercises similar to workplace functions that could cause face piece leakage.
7. QNFT – measures the contamination inside the test atmosphere and inside the respirator itself.
8. Employees will be fit tested with the make, model, and size of respirator that they will actually wear.
9. Employees will conduct a user seal check each time they don their respirator by performing both positive and negative fit checks and pressure checks to make sure the respirator is properly seated to the face and to check that the respirator is working.
10. Positive Fit Check – This test must be performed by closing off the exhalation valve by hand and breathing air into the mask. The face fit is satisfactory if some pressure can be built up inside the mask without any air leaking out between the mask and the face of the wearer.
11. Negative Fit Check – This test is performed by closing of the inlet openings of the cartridge with the palm of the hand. Some masks may require that the filter holder be removed to seal off the intake valve. The user must inhale gently so that a vacuum occurs within the face piece and hold their breath for 10 seconds. If the vacuum remains, and no inward leakage is detected, the respirator is fit properly.
12. Employees are not permitted to wear tight-fitting respirators if they have any condition, such as facial scars, facial hair, or missing dentures, that would prevent a proper seal.
13. Individuals that choose to wear facial hair which prevents a proper

 face seal, may be allowed to select a PAPR if their job duties do not require entry into areas deemed as immediately dangerous to life or health.

1. Employees are not permitted to wear headphones, jewelry, or other items that may interfere with the seal between the face and the face piece.

**07. PROCEDURES FOR RESPIRATOR SELECTION**

07.01 Respirators shall be selected based on respiratory hazards to

which the employee is exposed. No single respirator type or filter type will cover every requirement. Only NIOSH-approved respirators and supplies will be used. Instruction sheets and packaging should be provided by the manufacturer.

07.02 Where feasible, half-face or full-face air purifying respirators will be assigned to individual employees for their exclusive use. Shared respirators will be thoroughly cleaned and disinfected after each use.

**08. PROCEDURE FOR SURVEILLANCE OF THE WORK AREA**

08.01 Employees must continue to monitor all workplaces when the possibility of respiratory hazards exist. SCBAs can only be used in oxygen deficient atmospheres. This ongoing monitoring ensures that exposure levels have not risen above the protection capabilities of their respirators.

**09. PROCEDURES FOR INSPECTION AND EVALUATION OF THE PROGRAM**

09.01 There will be regular inspections and evaluations to determine the continued effectiveness of the Respiratory Protection Program. The supervisor or manager will make frequent inspections of all areas where respirators are used to ensure compliance.

09.02 Every third year, the entire Respiratory Protection Program shall receive a thorough review by the program administrator to determine the program’s effectiveness. The following areas will be assessed:

 a. employee acceptance and uses of respirators; and

 b. verification that the program procedures are being followed.

09.03 The program administrator will work closely with the supervisor and employees to document any problems identified and follow them up with an investigation to determine corrective and preventative actions needed. Corrective action will be taken immediately to preserve the health and safety of employees.

**10. PROCEDURES FOR EMPLOYEE TRAINING**

10.01 Both employees and supervisors will be trained by the program administrator, or a consultant approved by the program administrator. All employees shall be given adequate training by a qualified person to ensure the proper use of respirators. If there is ever any doubt about any aspect of training, the program administrator or shop supervisor shall be notified, and the matter clarified.

10.02 At a minimum, the employee will be instructed and trained on donning and doffing a respirator and respirator limitations.

10.03 All employees shall receive annual refresher training, which shall be recorded by the employee’s supervisor. Copies of training records shall be maintained by EHSREM.

**11. PROCEDURE FOR RESPIRATOR ASSIGNMENT**

11.01 The program administrator shall maintain copies on the issuance of respirators to employees and record the date of initial issue. Departments shall be responsible for maintaining an ample supply of filters. Respirator cartridges are not interchangeable between brands. Each brand of respirator must be used with that same brand of cartridges or filters. Employees should use only the respirator, cartridges, and filters assigned to them and only those that they have been fit tested to wear.

**12. RESPIRATOR MAINTENANCE AND CARE PROCEDURES**

12.01 To retain their effectiveness, respirators shall be properly maintained. Employees shall ensure that the following practices are properly performed: cleaning and disinfecting, storage, and periodic inspections and repairs.

12.02 Cleaning and Disinfecting

1. Each department supervisor or shop supervisor will provide supplies for cleaning and disinfecting respirators.
2. Respirators will be inspected during cleaning. Cartridges, filters, headbands, and filter holders will be removed to completely disassemble the respirator.
3. Face pieces will be washed in soapy water or in the solution recommended by the manufacturer. A disinfecting rinse will follow the wash.
4. Face pieces will be rinsed in warm water (about 120 degrees F) and air dried on a clean shelf or countertop.
5. Respirators will be reassembled, and any defective parts will be replaced.

12.03 Storage

1. Respirators must be placed in a sealed container or zip-lock storage bag. Cartridges must be stored in a separate zip-lock bag to prevent contaminants that might be on the cartridges to off-gas onto the face piece.
2. Respirators must be stored in a clean, sanitary, and moderate temperature environment away from dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals.
3. Face pieces must not be hung by headbands or placed in any position that may cause distortion which may lead to a damaged face-to-mask seal.

 12.04 Periodic Inspections and Repairs

1. If, during a routine inspection or if a user notices that something is wrong with the respirator, repairs must be made immediately, or a replacement respirator must be provided. Check all the parts for wear or damage, paying special attention to rubber or plastic parts which can deteriorate.
2. Repairs must be made only by trained personnel using parts specifically designed for the particular brand or type of respirator.
3. It is the individual user's responsibility to comply with these procedures and to inform the supervisor if parts or the entire respirator needs to be replaced.

**13. PROCEDURES FOR ONGOING MEDICAL STATUS CHECKS**

 13.01 An annual Respirator Medical Evaluation Questionnaire and a fit test must be completed on all employees cleared to wear a respirator.

13.02 Every three years, all employees (except employees exposed to lead paint and licensed asbestos workers) must additionally undergo a pulmonary function test (PFT).

13.03 Employees exposed to lead paint and licensed asbestos workers undergo a PFT annually.

**14. RECORDKEEPING**

14.01 A copy of the Respiratory Protection Program and the [1910.134 OSHA Standard](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134) shall be kept by the program administrator and made available to employees who wish to review it.

14.02 Copies of training and fit test records shall be maintained by the program administrator. Training records will be updated as new employees are trained, as existing employees receive refresher training, and as new fit tests are conducted.

14.03 The completed medical questionnaires shall be maintained at the Student Health Center, and the evaluating physician’s documented findings will remain confidential in the employee’s medical records.

14.04 The medical records associated with the Respiratory Protection Program for each employee shall be preserved and maintained according to the University’s Records Retention Schedule (see [RSK620](https://alkek.library.txstate.edu/scripts/rrs/index.php?tsus=&series=RSK620) for Medical Records: Surveillance and Exposure (Employee)).

**15. REFERENCES**

15.01 The [29 CFR 1910.134 OSHA Respiratory Protection Standard](https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134) was used as a reference in the development of the Texas State Respiratory Protection Program; additional references are as follows:

1. [40 CFR 260 through 268 EPA Hazardous Waste](https://www.ecfr.gov/cgi-bin/text-idx?SID=e55fbdb3713b33fb9aa23a8a8b56c216&mc=true&tpl=/ecfrbrowse/Title40/40CIsubchapI.tpl);
2. [30 TAC Part 1 §335 TCEQ Hazardous Waste](http://texreg.sos.state.tx.us/public/readtac%24ext.ViewTAC?tac_view=4&ti=30&pt=1&ch=335);
3. [25 TAC Part 1 §295A Hazard Communication](https://texreg.sos.state.tx.us/public/readtac%24ext.ViewTAC?tac_view=5&ti=25&pt=1&ch=295&sch=A&rl=Y);
4. [25 TAC Part 1 §296 Texas Asbestos Health Protection;](https://www.dshs.texas.gov/asbestos/laws-rules.aspx)

1. [NFPA Halon Extinguisher Fire Suppression Systems](https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=12A&tab=committee);
2. [ANSI Z88.2-\_2015 Respiratory Protection](https://law.resource.org/pub/us/cfr/ibr/002/ansi.z88.2.1992.pdf);
3. [CGA G-7.1-2018, Commodity Specification for Air Grade D Breathing Air](http://airsystems.com/Reference/CGA%20Air%20Grade%20Specifications.pdf);
4. [NIOSH Pocket Guide to Chemical Hazards](https://www.cdc.gov/niosh/npg/default.html);
5. [Mold Assessors and Remediators Administrative Rules](https://texreg.sos.state.tx.us/public/pub_doc_request%24chapter_reques.startup?P_PART_ID=4&P_TITLE_ID=16&P_CHAPTER_ID=78&P_8=78&P_10=4&P_11=16&P_12=245805900000&P_6=16&P_7=4&P_1=16&P_3=245118000000&Z_CHK=56849); and
6. [NIOSH Respiratory Protection Program](http://www.cdc.gov/niosh/topics/respirators/).
7. **REVIEWERS OF THIS UPPS**

16.01 Reviewers of this UPPS include the following:

Position Date

Director, Environmental, Health, February 1 E3Y

Safety, Risk and Emergency

Management

Director, Student Health Center February 1 E3Y

Associate Vice President for Facilities February 1 E3Y

**17. CERTIFICATION STATEMENT**

This UPPS has been approved by the following individuals in their official capacities and represents Texas State policy and procedure from the date of this document until superseded.

Director, Environmental, Health, Safety, Risk and Emergency Management; senior reviewer of this UPPS

Vice President for Finance and Support Services

President