
Environmental Health & Safety Policies

Operations

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Respiratory Protection Program Policies and Procedures

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Policy Timeline

Initial Effective Date: October 1, 2017
 Frequency of Review: Bi-annually
 Date(s) Revised: July 16, 2024

Policy Overview

It is the policy of the University of Health Sciences and Pharmacy in St. Louis to provide its employees with a safe and healthful work environment. The guidelines in the respiratory protection program are designed to help reduce employee exposure against occupational dusts, fumes, mists, biological, radionuclides, gases and vapors. The primary objective is to prevent excessive exposure to these contaminants. This is accomplished as far as feasible by accepted engineering and work practice control measures. When effective engineering controls are not feasible, or while they are being implemented or evaluated, respiratory protection may be required to achieve this goal. In these situations, respiratory protection, training and medical evaluations are provided at no cost to the employees.

Applies to: (examples—Faculty, Staff, Students, etc)

UHSP faculty, staff, and students with verified risk for occupational exposure to respiratory hazards/irritants.

Definitions: (optional; suggested for terms that have specialized meaning in the policy)

Term	Definition
Fit test	Means the use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual.
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.
Immediately Dangerous to Life and Health (IDLH)	(IDLH) is defined by the US National Institute for Occupational Safety and Health (NIOSH) as exposure to airborne contaminants that is

	"likely to cause death or immediate or delayed permanent adverse health effects or prevent escape from such an environment.
Positive 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.
Qualitative fit test (QLFT)	Means a pass/fail fit test to assess the adequacy of a respirator fit that relies on the individual's response to the test agent.
Quantitative fit test (QNFT)	Means an assessment of the adequacy of a respiratory fit by numerically measuring the amount of leakage into the respirator.
Self-contained breathing apparatus (SCBA)	Means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.
Negative Air Purifying respirator	A negative pressure respirator refers to any tight-fitting respirator in which the air pressure inside the face mask is negative during inhalation with respect to air pressure outside the respirator.
Program Administrator	The program administration is the individual who oversees the respiratory protection program. UHSP has assigned this role to EH&S
Program Participant	An individual covered under this policy whose position has sufficient risk under the Hazard Assessment to require use of a respirator.

Policy Details

- I. Purpose
 - a. The purpose of this respirator program is to establish standard operating procedures to ensure the protection of all program participants from respiratory hazards through proper selection and use of respirators. This program applies to all program participants who are required to wear respirators during normal operations, non-routine tasks, or emergency operations such as a spill of a hazardous substance.

Procedures

- I. Responsibilities
 - a. Program Administrator Duties
 - i. UHSP has designated the office of EH&S as the program administrator to oversee the respiratory protection program. Duties of the office include:
 1. Identifying work areas, processes or tasks that require workers to wear respirators, and evaluating hazards
 2. Selection of respiratory protection options
 3. Monitoring respirator use to ensure that respirators are used in accordance with their certifications
 4. Arranging for and/or conducting training
 5. Ensuring proper storage and maintenance of respiratory protection equipment

6. Conducting or arranging for fit testing
7. Administering the medical surveillance program
8. Maintaining records required by the program
9. Evaluating the program
10. Updating written program as needed

b. Supervisor Duties

i. Supervisors are responsible for ensuring that the respiratory protection program is implemented in their particular areas. In addition to being knowledgeable about the program requirements for their own protection, supervisors must also ensure that the program is understood and followed by the program participants under their charge. Duties of the supervisor include:

1. Ensuring that program participants under their supervision (including new hires) have received appropriate training, fit testing, and medical evaluation
2. Ensuring the availability of appropriate respirators and accessories
3. Being aware of tasks requiring the use of respiratory protection
4. Enforcing the proper use of respiratory protection when necessary
5. Ensuring that respirators are properly cleaned, maintained, and stored according to the respiratory protection plan
6. Ensuring that respirators fit well and do not cause discomfort
7. Continually monitoring work areas and operations to identify respiratory hazards
8. Coordinating with the program administrator on how to address respiratory hazards or other concerns regarding the program

c. Program Participants' Duties

i. Each employee has the responsibility to wear his or her respirator when and where required and in the manner in which they were trained. Program participants must also:

1. Care for and maintain their respirators as instructed and store them in a clean sanitary location
2. Inform their supervisor if the respirator no longer fits well, and request a new one that fits properly
3. Inform their supervisor or the Program Administrator of any respiratory hazards that they feel may not be adequately addressed in the workplace and of any other concerns that they have regarding the program

II. Program Elements

a. Hazard Assessment

i. The Program Administrator will conduct a hazard evaluation for each operation process, or work area where airborne contaminants may be present in routine operations or during an emergency. The hazard evaluation will include (see example 1):

1. Identification of the hazardous substances used in the workplace, department or work process;
 2. Review of work processes to determine where potential exposures to these hazardous substances may occur; and
 3. Exposure monitoring to quantify potential hazardous exposures.
- ii. The hazard evaluations will be evaluated by the Program Administrator with consultation from experts in airborne contaminants as necessary (such as an occupational health professional or health care provider trained to conduct health assessments for airborne contaminants and respirator fit testing). The results of the hazard evaluation are maintained by the Program Administrator for employee review. The program administrator will revise and update the hazard assessment as needed (i.e., any time work process changes which may potentially affect exposure).
 - iii. The Program Administrator will communicate with Human Resources regarding locations where the hazard assessment indicates that respirator use is required. Human Resources will track employees who have routine or potential emergency work in these areas. These individuals will be designated as “program participants”.

III. Respiratory Selection

- a. Respirators are selected on the basis of the hazards to which the program participants are exposed and in accordance with OSHA requirements. Only NIOSH certified respirators will be selected and used.
 - i. General Requirements
 1. The employer shall select and provide an appropriate respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability.
 2. The employer shall select a NIOSH-certified respirator. The respirator shall be used in compliance with the conditions of its certification.
 3. The employer shall identify and evaluate the respiratory hazard(s) in the workplace; this evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where the employer cannot identify or reasonably estimate the employee exposure, the employer shall consider the atmosphere to be IDLH.
 4. The employer shall select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.
- b. Respirators for Immediately Dangerous to Life and Health (IDLH) atmospheres
 - i. All oxygen-deficient atmospheres shall be considered IDLH. Exception: If the employer demonstrates that, under all foreseeable conditions, the oxygen concentration can be maintained within the ranges specified in Table II of this

section [29 CFR 1910.134(d), i.e., for the altitudes set out in the table], then any atmosphere-supplying respirator may be used. STLCOP does not allow program participants to work under any IDLH conditions.

- c. Respirators for atmospheres that are not IDLH
 - i. The employer shall provide a respirator that is adequate to protect the health of the employee and ensure compliance with all other OSHA statutory and regulatory requirements, under routine and reasonably foreseeable emergency situations, such as incidental spills and releases.
- d. NIOSH Certification
 - i. All respirators must be certified by the National Institute for Occupational Safety and Health (NIOSH) and shall be used in accordance with the terms of that certification. Also, all filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label. The label must not be removed or defaced while it is in use.

IV. Voluntary Respirator Usage

- a. The University will provide (or allow employee-owned) respirators to program participants for voluntary usage for use against nuisance non-hazardous particulate (e.g., fiberglass, sheet rock dust, sawdust, dirt, pollen, animal dander).
- b. The Program Administrator will provide all program participants who voluntarily choose to wear either of the above respirators with a copy of 29 CFR 1910.134, Appendix D of the OSHA Standard. (Appendix D details the requirements for voluntary use of respirators by program participants.) Program participants choosing to wear an N-95 or a half face-piece air purifying respirators (APR) must comply with the procedures for medical evaluation, respirator use, and cleaning, maintenance and storage.
- c. The Program Administrator shall authorize voluntary use of respiratory protective equipment as requested by all other workers on a case-by-case basis, depending on specific workplace conditions and the results of the medical evaluations. The employee must also complete the voluntary use form and submit it to the Human Resources Office.

V. Medical Evaluation

- a. Program participants who are required to wear respirators must be medically evaluated before being permitted to wear a respirator on the job. Program participants are not permitted to wear respirators until a physician has determined that they are medically able to do so.
- b. A licensed health care professional will provide the medical evaluation to program participants. Human Resources, or designee, such as the Vice President, Operations, shall authorize medical evaluation of the completed form at an approved vendor such as:

- i. **Barnes Care Midtown**

- 5000 Manchester Ave St Louis, MO 63110

- Phone: (314) 747-5800 Fax:(314) 747-5866

7:30 a.m.-6 p.m. Monday – Friday

ii. **Concentra – Midtown**

6542 Manchester Ave St. Louis, MO 63139

Phone: (314) 647-0081

8 a.m.-5 p.m. Monday – Friday

c. The medical evaluation procedures are as follows:

- i. The medical evaluation will be conducted using medical questionnaire provided in Appendix C of 29 CFR 1910.134 Respiratory Protection Standard. Barnes Care or Concentra will provide a copy of this questionnaire to all employees requiring medical evaluation.
- ii. To the extent feasible, the company will assist program participants who are unable to read the questionnaire. When this is not possible the employee will be sent directly to the health care professional for assistance and medical evaluation.
- iii. All affected program participants will be given a copy of the medical questionnaire to fill out, along with a stamped and addressed envelope for mailing the questionnaire to the health care professional. Program participants will be permitted to fill out the questionnaire on company time.
- iv. Follow up medical exams will be provided to program participants as required by the OSHA standard, and/or as deemed necessary by the health care professional.
- v. All program participants will be allowed the opportunity to speak with the health care professional about their medical evaluation if they so request.
- vi. The program administrator will provide the health care professional with a copy of this program and a copy of OSHA's respiratory protection standard. For each employee requiring evaluation, the health care professional will be provided with information regarding the employee's work area or job title, proposed respirator type and weight, length of time required to wear the respirator, expected physical work load (light, moderate, or heavy), potential temperature and humidity extremes, and any additional protective clothing required.
- vii. After an employee has received clearance to wear a respirator, additional medical evaluations will be provided under any of the following circumstances:
 1. The employee reports signs and/or symptoms related to their ability to use a respirator, such as shortness of breath, dizziness, chest pains, or wheezing;
 2. The health care professional or supervisor informs the Program Administrator that the program participants needs to be reevaluated;
 3. Information from this program, including observations made during fit testing and program evaluation, indicates a need for reevaluation; and
 4. A change occurs in workplace conditions that may result in an increased physiological burden on the employee.

- d. NOTE: All examinations and questionnaires are to remain confidential between the employee and the physician.
- VI. Failure/Refusal to complete medical exam /use respirator/ participate in program
- a. Program participants who have been deemed to be covered under the respiratory program must follow program guidelines. Failure to follow program guidelines such as completing a medical exam, getting respirator fit tested, following respirator use policies and procedures, can result in disciplinary action, removal from the position, and/or separation. Employees who refuse to follow program guidelines will not be allowed to work.
 - b. Should the employee be unable to participate for a medical reason, the University will make a reasonable attempt to transfer the employee to another position for which there is a vacancy and the individual is qualified, but this cannot be guaranteed. Employees seeking a disability accommodation under ADA should contact Human Resources.
- VII. Fit Testing Procedures
- a. Barnes Care or Concentra will ensure that fit-test will be administered using an OSHA-accepted qualitative fit test (QLFT) or quantitative fit test (QNFT) protocol. The OSHA-accepted QLFT and QNFT protocols are contained in Appendix A of the OSHA Respiratory Standard (1910.134).
 - b. STLCOP requires program participants to be fit tested at the following times and with the same make, model, style, and size of respirator that they will be using.
 - i. Before being allowed to wear any respirator with a tight-fitting face piece and at least annually thereafter;
 - ii. Whenever a different respirator face piece (size, style, model, or make) is used;
 - iii. Whenever visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight; and
 - iv. Upon employee notification that the fit of the respirator is unacceptable.
 - c. EH&S Coordinator will maintain a record of the fit tests administered to program participants including (see example 2):
 - i. The name or identification of the employee tested;
 - ii. Type of fit test performed;
 - iii. Specific make, model, style, and size of respirator tested;
 - iv. Date of test; and
 - v. The pass/fail results
- VIII. Use of Respirators
- a. General Use Procedures
 - i. Program participants will use their respirators under conditions specified by this program, and in accordance with the training they receive on the use of each particular model. In addition, the respirator shall not be used in a manner for which it is not certified by NIOSH or its manufacturer.

- ii. All program participants shall conduct user seal checks each time that they wear their respirator. Program participants shall use either the positive or negative pressure check (depending on which test works best for them) specified in Appendix B-1 of the OSHA Respiratory Protection Standard.
 - iii. All program participants shall be permitted to leave the work area to maintain their respirator for the following reasons:
 - 1. To clean their respirator if the respirator is impeding their ability to work, change filters or cartridges, replace parts, or to inspect respirator if it stops functioning as intended.
 - iv. Program participants should notify their supervisor before leaving the area.
 - v. Program participants are not permitted to wear tight fitting respirators if they have any condition, such as facial hair, facial scars, or missing dentures that prevents them from achieving a good seal. Program participants are not permitted to wear headphones, jewelry, or other articles that may interfere with the face piece to face seal.
- b. Emergency Procedures
 - i. The following work areas have been identified as having potential emergencies that are considered incidental spills or releases:
 - 1. Teaching and research laboratories on campus
 - 2. Solvent storage areas on campus
 - 3. Facilities areas on campus
- c. Immediately Dangerous to Life or Health (IDLH) Procedures
 - i. The Program Administrator has identified the following area(s) as presenting the potential for IDLH conditions: None listed because program participants at STLCOP are not permitted to work in IDLH conditions.
- d. Respirator Malfunction
 - i. For any malfunction of a respirator (e.g., such a breakthrough, face piece leakage, or improperly working valve), the respirator wearer should inform his or her supervisor that the respirator no longer functions as intended, and go to a safe area to maintain the respirator. The supervisor must ensure that the employee receives the needed parts to repair the respirator, or is provided with a new respirator.
- e. Maintenance and Care Procedures
 - i. In order to ensure continuing protection from the respirators being use, it is necessary to establish and implement proper maintenance and care procedures and schedules. A lax attitude toward maintenance and care will negate successful selection and fit because the devices will not deliver the assumed protection unless they are kept in good working order.
 - ii. Cleaning and Disinfecting
 - 1. The University provides each respirator user with a respirator that is clean, sanitary, and in good working order. We ensure that respirators are cleaned and disinfected at least weekly or as often as necessary to

be maintained in a sanitary condition. Respirators are cleaned and disinfected using the procedures specified in Appendix B-2 of the OSHA Standard or manufacturer's recommendations.

2. Respirators are cleaned and disinfected:
 - a. As often as necessary when issued for the exclusive use of one employee;
 - b. Before being worn by different individuals;
 - c. After each use for emergency use respirators; and
 - d. After each use for respirators used for fit testing and training.

iii. Storage

1. Storage of respirators must be done properly to ensure that the equipment is protected and not subject to environmental conditions that may cause deterioration. We ensure that respirators are stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. They are packed and stored in accordance with any applicable manufacturer's instructions.
2. Emergency respirators are stored:
 - a. To be accessible to the work area;
 - b. In compartments marked as such; and
 - c. In accordance with manufacturer's recommendations.

iv. Respiratory Inspection

1. All respirators will be inspected after each use and at least monthly. Should any defects be noted, the respirators will be taken to the program administrator or supervisor. Damaged respirators will be either repaired or replaced.
2. Respirators shall be inspected as follows:
 - a. All respirators used in routine situations shall be inspected before each use and during cleaning;
 - b. All respirators maintained for use in emergency situations shall be inspected at least monthly and in accordance with manufacturer's recommendations, and shall be checked for proper function before and after each use; and
 - c. Emergency escape-only respirators shall be inspected before being carried into the workplace for use.
3. Respirator inspections shall include the following:
 - a. A check of respirator function, tightness of connections, and the condition of the various parts including, but not limited to, the face piece, head straps, valves, connecting tube, and cartridges, canisters or filters; and
 - b. Check of elastomeric parts for pliability and signs of deterioration.

- f. The following checklist will be used when inspecting respirators:
 - i. Face piece:
 - 1. cracks, tears, or holes
 - 2. facemask distortion
 - 3. cracked or loose lenses/face shield
 - ii. Head straps:
 - 1. breaks or tears
 - 2. broken buckles
 - iii. Filters/Cartridges:
 - 1. approval designation
 - 2. gaskets
 - 3. cracks or dents in housing
 - 4. proper cartridge for hazard
 - iv. Air Supply Systems:
 - 1. breathing air quality/grade
 - 2. filter integrity
 - 3. battery charge
 - 4. condition of supply hoses
 - 5. hose connections
 - 6. settings on regulators and valves
- g. Respiratory Filter and Canister Replacement/Change Schedule
 - i. An important part of the Respiratory Protection Program includes identifying the useful life of canisters and filters used on air purifying respirators. Each filter and canister shall be equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant; or
 - ii. If there is no ESLI appropriate for conditions a change schedule for canisters and cartridges that is based on objective information or data that will ensure that canisters and cartridges are changed before the end of their service life.
 - iii. Cartridges/Filters shall be changed based on the most limiting factor below:
 - 1. Prior to expiration date
 - 2. Manufacturer's recommendations for use and environment
 - 3. After each use
 - 4. When requested by employee
 - 5. When restriction to air flow has occurred as evidenced by increased effort by user to breathe normally

IX. Training

- a. EH&S will be responsible to provide training to respirator training to respirator users or their supervisors on the contents of the Respiratory Protection Program and their responsibilities under it, and on the OSHA Respiratory Protection Standard. Workers will be trained prior to using a respirator in the workplace. Supervisors will also be trained prior to using a respirator in the workplace or prior to supervision of program participants that must wear respirators.

- b. The training will cover the following topics:
 - i. The UHSP Respiratory Protection Program
 - ii. The OSHA Respiratory Protection Standard
 - iii. Respiratory hazards encountered and their health effects
 - iv. Proper selection and use of respirators
 - v. Limitations of respirators
 - vi. Respirator donning and user seal (fit) checks
 - vii. Fit testing
 - viii. Emergency use procedures
 - ix. Maintenance and storage
 - x. Medical signs and symptoms limiting the effective use of respirators
 - c. Program participants will be retrained annually or as needed (e.g., if they need to use a different respirator). Program participants must demonstrate their understanding of the topics covered in the training utilizing a hands-on exercise and a test demonstrating knowledge retention. Respirator training will be documented by the Program Administrator and the documentation will include the type, model, and size of respirator for which each employee has been trained and fit tested.
- X. Program Evaluation
- a. The program administrator will conduct periodic evaluations of the workplace to ensure that the provisions of this program are being implemented. The evaluation will include regular consultations with program participants who use respirators and their supervisors, site inspections, air monitoring and review of records.
 - b. Identified problems will be noted and addressed by the Program Administrator. These findings will be reported to management, and the report will list plans to correct deficiencies in the respirator program and target dates for the implementations of those corrections.
- XI. Documentation and Recordkeeping
- a. A written copy of this program and the OSHA standard is kept in the Program Administrator's office and is available to all program participants who wish to review it.
 - b. Also maintained in the Program Administrator's office is an active log of program participants registered in the program, copies of trainings and fit test records. These records will be updated as new program participants are added or removed from the program, as new program participants are trained, as existing program participants receive refresher training and as new fit tests are conducted.
 - c. Human Resources will also record employees who are covered under the scope of the respirator program. The Human Resources Office will maintain copies of the medical records for all employees covered under the respirator program. All information obtained through the health evaluation process will be kept confidential by Human Resources. However, information may be shared with appropriate UHSP leaders, as determined by the Director of Human Resources, with a legitimate business need to know.

Responsibilities

<u>Position/Office/Department</u>	<u>Responsibility</u>
Environmental Health & Safety EH&S	Serve as the Program Administrator for procedures of this policy
Supervisor	Ensure compliance and adherence to respirator protection program for employees with occupational exposure to respiratory hazards/irritants
Human Resources	Maintain copies of the medical records for all employees covered under the respirator program. All information obtained through the health evaluation process will be kept confidential by Human Resources

Resources (required for any resource referred to in the policy)

UHSP Voluntary Respiratory Use Form

Example 1: UHSP HAZARD ASSESSMENT

Example 2: UHSP EMPLOYEE RESPIRATOR USE LOG

Example 3: OSHA Respirator Medical Evaluation Questionnaire

Policy Contacts

<u>Name</u>	<u>Contact Information</u>
Eric Knoll	314-446-8375
Carlin Harp	314-446-8133
Dan Bauer	314-446-8308

POLICY APPROVALS

POC:	<input type="checkbox"/> Approved as to Form	<input type="checkbox"/> Not Approved	
POC Chair Signature:			
Date:			
Policy Sponsor:	<input type="checkbox"/> Approved	<input type="checkbox"/> Not Approved	
Signature:			
Date:			
President:	<input type="checkbox"/> Approved	<input type="checkbox"/> Not Approved	
Signature:			
Date:			
Board of Trustees:	<input type="checkbox"/> Approved	<input type="checkbox"/> Not Approved	<input type="checkbox"/> Not Applicable
Chair Signature:			
Date:			

UHSP Voluntary Respiratory Use Form

Some employees, students, or affiliates may choose to use filtering face piece respirators, also referred to as N95 or N99 disposable dust masks, on a voluntary basis during activities that involve exposures to low-level, non-hazardous nuisance dust or other similar particulate. According to the Occupational Safety and Health Administration (OSHA) regulations, University of Health Sciences and Pharmacy must provide you with the following information if you wear a filtering face piece respirator voluntarily. The following information is copied from the OSHA Respiratory Protection Standard and pertains to the voluntary use of respirators. After reading the information below, please complete the section at the end of this form.

29 CFR 1910.134, Appendix D - (Mandatory) Information for Employees Using Respirators When Not Required Under the Standard

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 indicating 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.
- 4) Keep track of your respirator so that you do not mistakenly use someone else's respirator.

The filtering face piece respirator you have elected to use is approved, when fitted properly, for use against nuisance non-hazardous particulate (e.g., fiberglass, sheet rock dust, sawdust, dirt, pollen, animal dander). It will not provide protection from any chemical vapors such as those associated with spray paints or solvents. It is not intended for use during work that may involve exposure to airborne asbestos fibers, silica dust, or lead dust. Work you perform that may involve airborne asbestos fibers, silica dust, or lead dust should be reviewed by EH&S before the project proceeds. If you have questions concerning any of this information, please call EH&S at (314) 446-8375.

Please complete the section below:

Name (print): _____ Job Title: _____

Department: _____ PI/Supervisor: _____

Reason for using dust mask (describe nature of work, specific location, and type of dust):

I have read and understood the information provided above: _____

(Employee signature)

Example 1: UHSP HAZARD ASSESSMENT (ADD DATE)

Department	Contaminants	Exposure Level (8 hrs TWA)	PEL	Controls
<i>[Example: e.g., Prep: sanding]</i>	<i>wood dust</i>	<i>2.5 - 7.0 mg/m³</i>	<i>5 mg/m³ (TLV = 1 mg/m³)</i>	<i>Local exhaust ventilation for sanders, Half-facepiece APR with P100 filter.</i>
<i>[Example: e.g., Prep: cleaning]</i>	<i>methylene chloride</i> <i>methanol</i> <i>acetone</i>	<i>70 ppm</i> <i>150 ppm</i> <i>400 ppm</i>	<i>25 ppm</i> <i>125 ppm (STEL)</i> <i>200 ppm</i> <i>1,000 ppm</i>	<i>Local exhaust ventilation (LEV) to be installed for cleaning stations. Continuous flow SAR hood until then needed for respiratory protection. Will reevaluate after LEV installation.</i>

Example 2: UHSP EMPLOYEE RESPIRATOR USE LOG

<i>VOLUNTARY AND REQUIRED RESPIRATOR USE</i>					
INDIVIDUAL	RESPIRATOR TYPE	TYPE OF TEST	DEPARTMENT and PROCESS	INITIAL TEST DATE	PASS/FAIL
<i>[Example: John Doe]</i>	<i>[Example: Filtering facepiece (dust mask)]</i>	<i>[Qualitative]</i>	<i>[Voluntary use for warehouse workers]</i>		
<i>[Example: Jane Doe]</i>	<i>[Example: Half-facepiece APR or PAPR with P100 filter]</i>	<i>[Quantitative]</i>	<i>[Required use for maintenance workers when cleaning spray booth walls or changing spray booth filter]</i>		

Example 3: OSHA Respirator Medical Evaluation Questionnaire

To the employer: Answers to questions in Section 1, and to question 9 in Section 2 of Part A, do not require a medical examination.

To the employee: Your employer must allow you to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your employer or supervisor must not look at or review your answers, and your employer must tell you how to deliver or send this questionnaire to the health care professional who will review it.

Part A. Section 1. (Mandatory) The following information must be provided by every employee who has been selected to use any type of respirator (please print).

1. Today's date: _____

2. Your name: _____

3. Your age (to nearest year): _____

4. Sex (circle one): Male/Female

5. Your height: _____ ft. _____ in.

6. Your weight: _____ lbs.

7. Your job title: _____

8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): _____

9. The best time to phone you at this number: _____

10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No

11. Check the type of respirator you will use (you can check more than one category):

a. _____ N, R, or P disposable respirator (filter-mask, non-cartridge type only).

b. _____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).

12. Have you worn a respirator (circle one): Yes/No

If "yes," what type(s): _____

Part A. Section 2. (Mandatory) Questions 1 through 9 below must be answered by every employee who has been selected to use any type of respirator (please circle "yes" or "no").

1. Do you *currently* smoke tobacco, or have you smoked tobacco in the last month: Yes/No

2. Have you *ever had* any of the following conditions?

a. Seizures: Yes/No

b. Diabetes (sugar disease): Yes/No

c. Allergic reactions that interfere with your breathing: Yes/No

d. Claustrophobia (fear of closed-in places): Yes/No

e. Trouble smelling odors: Yes/No

3. Have you *ever had* any of the following pulmonary or lung problems?

a. Asbestosis: Yes/No

b. Asthma: Yes/No

c. Chronic bronchitis: Yes/No

d. Emphysema: Yes/No

e. Pneumonia: Yes/No

f. Tuberculosis: Yes/No

g. Silicosis: Yes/No

h. Pneumothorax (collapsed lung): Yes/No

i. Lung cancer: Yes/No

j. Broken ribs: Yes/No

k. Any chest injuries or surgeries: Yes/No

l. Any other lung problem that you've been told about: Yes/No

4. Do you *currently* have any of the following symptoms of pulmonary or lung illness?

- a. Shortness of breath: Yes/No
 - b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
 - c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
 - d. Have to stop for breath when walking at your own pace on level ground: Yes/No
 - e. Shortness of breath when washing or dressing yourself: Yes/No
 - f. Shortness of breath that interferes with your job: Yes/No
 - g. Coughing that produces phlegm (thick sputum): Yes/No
 - h. Coughing that wakes you early in the morning: Yes/No
 - i. Coughing that occurs mostly when you are lying down: Yes/No
 - j. Coughing up blood in the last month: Yes/No
 - k. Wheezing: Yes/No
 - l. Wheezing that interferes with your job: Yes/No
 - m. Chest pain when you breathe deeply: Yes/No
 - n. Any other symptoms that you think may be related to lung problems: Yes/No
5. Have you *ever had* any of the following cardiovascular or heart problems?
- a. Heart attack: Yes/No
 - b. Stroke: Yes/No
 - c. Angina: Yes/No
 - d. Heart failure: Yes/No
 - e. Swelling in your legs or feet (not caused by walking): Yes/No
 - f. Heart arrhythmia (heart beating irregularly): Yes/No
 - g. High blood pressure: Yes/No
 - h. Any other heart problem that you've been told about: Yes/No

6. Have you *ever had* any of the following cardiovascular or heart symptoms?

- a. Frequent pain or tightness in your chest: Yes/No
- b. Pain or tightness in your chest during physical activity: Yes/No
- c. Pain or tightness in your chest that interferes with your job: Yes/No
- d. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No
- e. Heartburn or indigestion that is not related to eating: Yes/No
- d. Any other symptoms that you think may be related to heart or circulation problems: Yes/No

7. Do you *currently* take medication for any of the following problems?

- a. Breathing or lung problems: Yes/No
- b. Heart trouble: Yes/No
- c. Blood pressure: Yes/No
- d. Seizures: Yes/No

8. If you've used a respirator, have you *ever had* any of the following problems? (If you've never used a respirator, check the following space and go to question 9:)

- a. Eye irritation: Yes/No
- b. Skin allergies or rashes: Yes/No
- c. Anxiety: Yes/No
- d. General weakness or fatigue: Yes/No
- e. Any other problem that interferes with your use of a respirator: Yes/No

9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

Questions 10 to 15 below must be answered by every employee who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). For employees who have been selected to use other types of respirators, answering these questions is voluntary.

10. Have you *ever lost* vision in either eye (temporarily or permanently): Yes/No
11. Do you *currently* have any of the following vision problems?
- a. Wear contact lenses: Yes/No
 - b. Wear glasses: Yes/No
 - c. Color blind: Yes/No
 - d. Any other eye or vision problem: Yes/No
12. Have you *ever had* an injury to your ears, including a broken ear drum: Yes/No
13. Do you *currently* have any of the following hearing problems?
- a. Difficulty hearing: Yes/No
 - b. Wear a hearing aid: Yes/No
 - c. Any other hearing or ear problem: Yes/No
14. Have you *ever had* a back injury: Yes/No
15. Do you *currently* have any of the following musculoskeletal problems?
- a. Weakness in any of your arms, hands, legs, or feet: Yes/No
 - b. Back pain: Yes/No
 - c. Difficulty fully moving your arms and legs: Yes/No
 - d. Pain or stiffness when you lean forward or backward at the waist: Yes/No
 - e. Difficulty fully moving your head up or down: Yes/No
 - f. Difficulty fully moving your head side to side: Yes/No
 - g. Difficulty bending at your knees: Yes/No
 - h. Difficulty squatting to the ground: Yes/No
 - i. Climbing a flight of stairs or a ladder carrying more than 25 lbs: Yes/No
 - j. Any other muscle or skeletal problem that interferes with using a respirator: Yes/No

Part B: Any of the following questions, and other questions not listed, may be added to the questionnaire at the discretion of the health care professional who will review the questionnaire.

1. In your present job, are you working at high altitudes (over 5,000 feet) or in a place that has lower than normal amounts of oxygen: Yes/No

If "yes," do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms when you're working under these conditions: Yes/No

2. At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (e.g., gases, fumes, or dust), or have you come into skin contact with hazardous chemicals: Yes/No

If "yes," name the chemicals if you know them: _____

3. Have you ever worked with any of the materials, or under any of the conditions, listed below:

a. Asbestos: Yes/No

b. Silica (e.g., in sandblasting): Yes/No

c. Tungsten/cobalt (e.g., grinding or welding this material): Yes/No

d. Beryllium: Yes/No

e. Aluminum: Yes/No

f. Coal (for example, mining): Yes/No

g. Iron: Yes/No

h. Tin: Yes/No

i. Dusty environments: Yes/No

j. Any other hazardous exposures: Yes/No

If "yes," describe these exposures: _____

4. List any second jobs or side businesses you have: _____

5. List your previous occupations: _____

6. List your current and previous hobbies: _____

7. Have you been in the military services? Yes/No

If "yes," were you exposed to biological or chemical agents (either in training or combat): Yes/No

8. Have you ever worked on a HAZMAT team? Yes/No

9. Other than medications for breathing and lung problems, heart trouble, blood pressure, and seizures mentioned earlier in this questionnaire, are you taking any other medications for any reason (including over-the-counter medications): Yes/No

If "yes," name the medications if you know them: _____

10. Will you be using any of the following items with your respirator(s)?

a. HEPA Filters: Yes/No

b. Canisters (for example, gas masks): Yes/No

c. Cartridges: Yes/No

11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?:

a. Escape only (no rescue): Yes/No

b. Emergency rescue only: Yes/No

c. Less than 5 hours *per week*: Yes/No

d. Less than 2 hours *per day*: Yes/No

e. 2 to 4 hours per day: Yes/No

f. Over 4 hours per day: Yes/No

12. During the period you are using the respirator(s), is your work effort:

a. *Light* (less than 200 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.

Examples of a light work effort are *sitting* while writing, typing, drafting, or performing light assembly work; or *standing* while operating a drill press (1-3 lbs.) or controlling machines.

b. *Moderate* (200 to 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.

Examples of moderate work effort are *sitting* while nailing or filing; *driving* a truck or bus in urban traffic; *standing* while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs.) at trunk level; *walking* on a level surface about 2 mph or down a 5-degree grade about 3 mph; or *pushing* a wheelbarrow with a heavy load (about 100 lbs.) on a level surface. c. *Heavy* (above 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: _____ hrs. _____ mins.

Examples of heavy work are *lifting* a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; *shoveling*; *standing* while bricklaying or chipping castings; *walking* up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator: Yes/No

If "yes," describe this protective clothing and/or equipment: _____

14. Will you be working under hot conditions (temperature exceeding 77 deg. F): Yes/No

15. Will you be working under humid conditions: Yes/No

16. Describe the work you'll be doing while you're using your respirator(s):

17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):

18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

Name of the first toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

Name of the second toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

Name of the third toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

The name of any other toxic substances that you'll be exposed to while using your respirator:

19. Describe any special responsibilities you'll have while using your respirator(s) that may affect the safety and well-being of others (for example, rescue, security):
