RESPIRATORY PROTECTION PROGRAM (OHS-0009)

For



Issued: January 2007 Revised: March 28, 2023



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RESPIRATORY PROTECTION PROGRAM OHS-0009

Dates Original: January 2007 Revised: March 28, 2023

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1.0 PURPOSE

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- **1.1** The purpose of the University's Respiratory Protection Program is to ensure that KSU faculty, staff and students who use respiratory protection devices are:
 - Provided with respiratory protection devices that are suitable for the tasks they perform;
 - Medically able to wear these devices;
 - Fit-tested to ensure proper fit; and
 - Trained in their use, maintenance and cleaning.

It is not only the intent of the employer to fully comply with applicable environmental, health and safety standards and regulations, but also to maintain and improve the overall safety of Kent State University (KSU).

2.0 DOCUMENT CONTROL

2.1 Approvals: This procedure as well as all Environmental, Health and Safety (EH&S) procedures must be approved by the Director, Environmental Health and Safety (DEHS).

Approved by Date: 03/28/2023 Director, Environmental Health and Safety Health and Safety

2.2 Responsibility:

- **2.2.1** The Administrator of this procedure is the MOHS. This includes updating / revising the procedure, arranging for typing and providing revised copies to the Master Copy Holder for distribution. The Administrator will establish a review schedule for this procedure to ensure that this procedure contains only the most current information relevant to existing federal, state and local laws and regulations governing respiratory protection.
- **2.2.2** The Master Copy Holder for this procedure is the DEHS. DEHS is responsible for ensuring that relevant elements of applicable quality control procedures governing policies, programs, procedures and checklists are being followed. This includes the preparation of revisions to this procedure, obtaining approvals, recording changes, distribution and



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compliance with other document(s).

3.0 DEFINITIONS

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.

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

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

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

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

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

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

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

Escape-only respirator: A respirator intended to be used only for emergency exit.

Facility management: Includes all KSU faculty, staff and students with managerial responsibility for other KSU faculty, staff or students.



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Facility personnel: Includes all KSU faculty, staff and students.

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

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.

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

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

Helmet: A rigid respiratory inlet covering that also provides head protection against impact and penetration.

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

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

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

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

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

Maximum use concentration (MUC): The maximum atmospheric concentration of a hazardous substance from which an employee can be expected to be protected when



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wearing a respirator and is determined by the assigned protection factor of the respirator or class of respirators and the exposure limit of the hazardous substance. The MUC can be determined mathematically by multiplying the assigned protection factor specified for a respirator by the required OSHA permissible exposure limit, short-term exposure limit, or ceiling limit. When no OSHA exposure limit is available for a hazardous substance, an employer must determine an MUC on the basis of relevant available information and informed professional judgment.

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

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

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

Positive pressure respirator: A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

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.

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

Qualified Trainer: Individuals with basic teaching skills as well as the knowledge and experience necessary to provide training for this program and evaluate the performance of trainees. KSU management will determine whether trainers satisfy these requirements before they are allowed to train KSU faculty, staff or students.

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.



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Respirator: A device worn over the mouth, nose and mouth, or head to prevent or minimize the inhalation of potentially toxic gases, vapors or particulates. This includes both air-purifying and atmosphere-supplying respirators.

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.

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

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

This section: this respiratory protection standard.

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

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

Voluntary respirator use: In most cases, respirators are required for certain jobs or tasks to protect workers from potential exposure to airborne contaminants. Occasionally, workers may choose to wear a respirator when it is not required for the job or task. Whether these respirators are provided by KSU or brought in by the employee for his/her own use, this is voluntary respirator use.



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4.0 **OBJECTIVE**

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- **4.1** KSU shall establish a Respiratory Protection Program consisting of, but not limited to, the following:
 - Procedures for selecting respirators;
 - Periodic medical evaluations for respirator users;
 - Periodic fit-testing to ensure that respirators adequately fit their users;
 - Procedures for using, cleaning, maintaining and storing respirators;
 - Training for respirator users; and
 - Procedures for periodically evaluating the effectiveness of this program.

5.0 SCOPE

- **5.1** This Respiratory Protection Program applies to all KSU faculty, staff and students who use a respirator as defined within this program. This program applies whether the respirator is required for a specific job or task or is worn on a voluntary basis.
- **5.2** This Respiratory Protection Program does not apply to third-party contractors or other non-KSU employees while on KSU property. However, non-KSU employees using respirators while on KSU property must enforce their own written Respiratory Protection Program that conforms to all applicable federal, state and local laws and regulations.

6.0 **RESPONSIBILITIES**

6.1 Manager, Occupational Health and Safety

- **6.1.1** MOHS shall develop and oversee implementation of a written Respiratory Protection Program.
- **6.1.2** MOHS shall conduct routine evaluations of the workplace to ensure that the written Respiratory Protection Program is being implemented and KSU faculty, staff and students are acting in accordance with established procedures and exercising necessary protective measures.



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- **6.1.2.1** MOHS shall conduct evaluations of the workplace to ensure that the current written program is effective.
- **6.1.2.2** MOHS shall regularly interview KSU faculty, staff and students to ascertain their views on the program's effectiveness and identify existing or potential problems.
- **6.1.3** MOHS shall provide qualitative or quantitative respirator fit tests to any KSU faculty, staff or student when and as requested by facility management (see 6.2.4 below).

6.2 Facility Management

- **6.2.1** KSU management shall establish a written Respiratory Protection Program. This program shall be accessible to all KSU faculty, staff and students.
- **6.2.2** KSU management shall ensure that faculty, staff and students for whom they have managerial responsibility are medically evaluated to determine if they can wear the respiratory protection devices required for the jobs or tasks they must perform.
- **6.2.3** KSU management shall ensure that faculty, staff and students for whom they have managerial responsibility are qualitatively or quantitatively fittested for each respiratory protection device required for the jobs or tasks they must perform.
- **6.2.4** KSU management shall provide KSU faculty, staff and students with information and training on the purpose and function of the Respiratory Protection Program and ensure the necessary knowledge and skills to ensure compliance with the established procedure.
- **6.2.5** KSU management shall take appropriate actions to ensure that KSU faculty, staff and students for whom they have managerial responsibility comply with all elements of the written Respiratory Protection Program.



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6.3 Facility Personnel

6.3.1 Facility personnel are expected to fully comply with applicable provisions of this Respiratory Protection Program.

7.0 METHODS OF COMPLIANCE

7.1 General.

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A simplified flow diagram for this process can be found in Appendix A of this program.

7.1.1 **Respirator Selection:**

KSU management shall select respiratory protection devices that are appropriate for the job or task. Sample respirator Types can be found in Appendix B of this program. MOHS will be consulted:

- The first time that a respiratory protection device is selected for a specific job or task; and
- Whenever there is sufficient cause to change the selection of respiratory protection device for a specific job or task.

KSU management must prepare and submit written documentation to the Occupational Health and Safety Office indicating that they have provided each KSU faculty, staff and student engaged in voluntary respirator use (see definition) with a copy of the information contained within Appendix C of this program.

7.1.2 Medical Evaluations:

KSU management shall ensure that faculty, staff and students for whom they have managerial responsibility are medically evaluated to determine if they can wear the respiratory protection devices required for the jobs or tasks they must perform. This does not apply to KSU faculty, staff and students who wear filtering facepiece respirators on a voluntary basis. Specific requirements include:

• Wherever possible, this medical evaluation shall be performed by



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PLHCP working at the University Health Service.

- This medical evaluation shall be performed prior to doing any job or task requiring the use of a respiratory protection device.
- Medical evaluations shall be repeated periodically at a frequency recommended by the PLHCP performing the initial medical evaluation.
- Medical evaluations must be satisfactorily completed before scheduling a respirator fit test (see 7.1.3 below).

The following procedure will be used in scheduling and performing respirator medical evaluations:

- **7.1.2.1** Wherever possible, KSU management shall schedule medical evaluations through the KSU University Health Services by calling (330) 672-2322 (2-2322 from any campus telephone).
- **7.1.2.2** Prior to the appointment, KSU management shall complete Section I of the Medical Clearance for Respirator Use form found in Appendix D. This form with Section I completed shall be sent to the University Health Service prior to the scheduled appointment. This can be accomplished by sending it through interorganizational mail or electronic mail (i.e., e-mail) prior to the appointment or by sending it with the KSU faculty, staff or student at the time of his / her appointment.
- **7.1.2.3** Prior to the appointment, KSU faculty, staff and/or students shall complete appropriate sections of the OSHA Respirator Medical Evaluation Questionnaire form. This form can be found in Appendix E of this program. The completed form is to be given to the PLHCP by each KSU faculty, staff or student at the beginning of his / her scheduled appointment. This completed form will be kept by the PLHCP after the scheduled appointment is completed. As required by OSHA, KSU management shall permit KSU faculty, staff and students to complete this form during normal working hours, or at a time and place that is convenient to them.
- 7.1.2.4 Upon completion of the scheduled appointment, the PLHCP will

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complete Section II of the Medical Clearance for Respirator Use form and return it to the supervisor designated in Section I of the form. This can be accomplished by sending it through interorganizational mail or electronic mail (i.e., e-mail) or by returning it with the KSU faculty, staff or student after the appointment.

7.1.2.5 KSU management shall ensure that a follow-up medical evaluation is scheduled based upon the recommendation of the PLHCP. If a follow-up appointment is recommended by the PLHCP, this will be indicated in Section II of the completed Medical Clearance for Respirator Use form.

7.1.3 Fit Testing:

KSU management shall ensure that faculty, staff and students for whom they have managerial responsibility are qualitatively or quantitatively fittested for each respiratory protection device required for the jobs or tasks they are required to perform. This does not apply to KSU faculty, staff and students who wear filtering facepiece respirators on a voluntary basis. Specific requirements include:

- Fit-testing is only required for respiratory protection devices using a tight-fitting facepiece.
- Fit-testing is not required for respiratory protection devices using a loose-fitting facepiece or hood.
- These fit tests shall be performed annually or more often if the type of respiratory protection device used for a particular job or task changes or the face of the respirator user changes significantly (e.g., major dental work, facial scarring, cosmetic surgery or significant changes in body weight).

The following procedure will be used in scheduling and performing respirator fit tests:

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- **7.1.3.1** KSU management shall schedule respirator fit tests through the KSU Occupational Health and Safety Office by calling (330) 672-9565 (2-9565 from any campus telephone). Respirator fit tests are not required for respiratory protection devices using a loose-fitting facepiece or hood. Respirator fit tests are required for all other respiratory protection devices. Respirator fit tests can only be scheduled if:
 - The KSU faculty, staff or student has successfully completed a medical evaluation (see Section 7.1.2 above); and
 - The KSU faculty, staff or student is clean-shaven in the area of respirator contact with the face. Facial hair can interfere with respirator fit.
- **7.1.3.2** Prior to the appointment, KSU management shall provide a copy of the completed Medical Clearance for Respirator Use form to the KSU Occupational Health and Safety Office. This can be accomplished by sending it through inter-organizational mail or electronic mail (i.e., e-mail) prior to the appointment or by sending it with the KSU faculty, staff or student at the time of his / her appointment.
- **7.1.3.3** If a KSU faculty, staff or student has been assigned and/or provided a respirator for his / her personal use, they shall bring their respirators with them to the scheduled fit-testing appointment.
- **7.1.3.4** When the respirator fit-test has been completed, the Occupational Health and Safety Office shall prepare and send a written report to the supervisor indicated in Section I of the completed Medical Clearance for Respirator Use form indicating what respiratory protection devices they were tested for and whether they passed or failed the test.
- **7.1.3.5** KSU management shall ensure that fit-tests are repeated at least annually or more often whenever the KSU faculty, staff and students reports, or the employer, PLHCP, supervisor, or program administrator makes visual observations of, changes in the KSU faculty, staff or student's physical condition that could affect



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respirator fit.

7.1.4 **Respirator Usage:**

KSU management shall ensure that KSU faculty, staff and/or students who use respiratory protection are medically evaluated and fit-tested for the respiratory devices required before assigning them to do any work requiring the use of respiratory protection.

7.1.5 Training:

KSU management shall ensure that KSU faculty, staff and/or students who use respiratory protection are trained at least annually in the following subjects:

- Why a respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of any respirator;
- What the limitations and capabilities of the respirator are; •
- 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;
- What the procedures are for maintenance and storage of the • respirator;
- How to recognize medical signs and symptoms that may limit or • prevent the effective use of respirators; and
- General requirements of the OSHA Respiratory Protection • standard (29 CFR Part 1910.134).



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7.1.6 **Program Evaluation:**

The Occupational Health and Safety Office shall conduct periodic evaluations of the workplace to ensure that the written Respiratory Protection Program is being implemented and KSU faculty, staff and students are acting in accordance with established procedures and exercising necessary protective measures. Factors to be assessed include, but are not limited to:

- Respirator fit (including the ability to use the respirator without interfering with effective workplace performance);
- Appropriate respirator selection for the hazards to which the KSU faculty, staff or student is exposed;
- Proper respirator uses under the workplace conditions the KSU faculty, staff or student encounters; and
- Proper respirator maintenance.

8.0 SYSTEM MAINTENANCE

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- **8.1** With one exception, respiratory protection devices are assigned for individual use by KSU faculty, staff and/or students. KSU faculty, staff and students are required to clean and maintain their own respiratory protection devices. KSU management shall provide sufficient training to permit KSU faculty, staff and/or students to clean and maintain their own respiratory protection devices (see Section 9.0 below).
- **8.2** Powered air purifying respirators (PAPRs) equipped with a loose-fitting facepiece or hood are assigned to departments for use by more than one individual. KSU management shall periodically clean and maintain respiratory protection devices assigned to their departments for use by more than one person. The frequency of cleaning and maintenance will conform with the recommendations of the equipment manufacturer.
- **8.3** Equipment used in performing medical evaluations shall be cleaned, inspected and maintained by the KSU University Health Service. The frequency of cleaning, inspection and maintenance will conform with the recommendations of the equipment manufacturer.



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- **8.4** Equipment used in performing respirator fit tests shall be cleaned, inspected and maintained by the Occupational Health and Safety Office. The frequency of cleaning, inspection and maintenance will conform with the recommendations of the equipment manufacturer.
- **8.5** All preventive maintenance, inspections and tests will be implemented and documented through the existing KSU computerized preventive maintenance program.

9.0 TRAINING

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- **9.1** All KSU faculty, staff and students who use respiratory protection devices shall receive initial training in the application of this program prior to using a respiratory protection device for the first time.
- **9.2** All KSU faculty, staff and students who use respiratory protection devices shall receive refresher training in the application of this program no less than every year.
- **9.3** All training required under this program will be provided by a qualified trainer (see definition).

10.0 RECORDKEEPING

- **10.1** KSU management shall complete a Medical Clearance for Respirator Use form, with support from a PLHCP at the KSU University Health Service. KSU management shall forward a copy of this form to the Occupational Health and Safety Office.
- **10.2** The Occupational Health and Safety Office must maintain a copy of all Medical Clearance for Respirator Use forms for the duration of employment plus thirty (30) years.
- **10.3** The Occupational Health and Safety Office must maintain a copy of all written respirator fit-test records for the duration of employment plus thirty (30) years.



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- 10.4 The Occupational Health and Safety Office must maintain copies of written documentation indicating that each KSU faculty, staff or student engaged in voluntary respirator use (see definition) has been provided a copy of the information contained within Appendix C of this program. This documentation must be kept on file for no less than five (5) years
- **10.5** Records of all preventive maintenance, inspections and tests of Respiratory Protection systems and equipment will be kept on file and available for auditors / inspectors for no less than five (5) years.

11.0 REFERENCES

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11.1 OSHA Respiratory Protection standard, 29 CFR Part 1910.134.



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APPENDIX A

SIMPLIFIED RESPIRATOR PROGRAM FLOW CHART



RESPIRATORY PROTECTION Dates **PROGRAM Original: January 2007** 001 **OHS-0009** Revised: March 28, 2023 COPY# Determine if Employee's Job / **Task Requires Respirator** Yes No Select Respirator Type(s). **Provide Voluntary Respirator Usage Information Perform Medical Evaluations Documentation to OHS Repeat Every 5 Years** for 5 Years **Documentation to University Perform Respirator Fit Tests** Health Service for 30+ Years **Repeat at Least Annually Documentation to OHS for 5 Years Provide Respirator Training Repeat at Least Annually Documentation to Clean / Maintain Respirators Training Database** for 5 Years For Individual Use For Group Use **Employees must clean / maintain Department must clean /** maintain PAPR's their own respirator **Documentation to Maintenance**

Management System for 5 Years

NOTE: This flow chart is intended to give generalized guidance for the requirements of the Respiratory Protection Program. It is impossible to make such a flow chart comprehensive. As a result, there may be small but significant requirements of the program left out of this flow chart. In these cases, the full written Respiratory Protection Program should be your guide.



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APPENDIX B

SAMPLE RESPIRATOR TYPES

NOTE: This flow chart is intended to give generalized guidance for the requirements of the Respiratory Protection Program. It is impossible to make such a flow chart comprehensive. As a result, there may be small but significant requirements of the program left out of this flow chart. In these cases, the full written Respiratory Protection Program should be your guide.



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The following are sample types of respirators used by KSU faculty, staff or students:

Filtering Facepiece Respirators (Also known as Single-Use or Disposable Respirators):



Half-Mask Air Purifying Respirators:

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3M (Normally used with one of the filter cartridges shown):



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North (Normally used with one of the filter cartridges shown):



Powered Air Purifying Respirators (Normally used with hood shown):



NOTE: This flow chart is intended to give generalized guidance for the requirements of the Respiratory Protection Program. It is impossible to make such a flow chart comprehensive. As a result, there may be small but significant requirements of the program left out of this flow chart. In these cases, the full written Respiratory Protection Program should be your guide.



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APPENDIX C

VOLUNTARY RESPIRATOR USAGE INFORMATION



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 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.

I have been provided a copy of the information contained within this appendix.

Name

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Date



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APPENDIX D

MEDICAL CLEARANCE FOR RESPIRATOR USE FORM



MEDICAL CLEARANCE FOR RESPIRATOR USE

|--|

Name:	Date of Evaluation:					
Department:	Date of Birth:					
Supervisor:						
Type or types of respirator (s) to be wor	n by the KSU faculty, staff or student					
Air-Purifying - Half mask (Negative Pressure - Non-Powered)						
Air-Purifying – Full Face (Negative Pressure - Non-Powered)						
Air Purifying - Powered Air Purifying Respirator (Positive Pressure)						
Single Use or Disposable (e.g., N95 paper dust mask)						
Other Please Describe:						
Select level of work effort	Extent of Usage					
Light	On a daily basis					
Moderate	 On a daily basis Occasionally-but more than once a week 					
Heavy	Rarely-or for emergency situations only					
	red effort (hours)					
	amining Physician or Other Licensed Health Care Professional:					
PLHCP Findings:						
No restrictions on respirator use						
-	No respirator use permitted					
Follow-up medical evaluation neede	ed – If checked, when?					
Restrictions (if any):						
Examining PLHCP:	(PLHCP's Signature)					
Acknowledgement:						
RETURN COMPLETED FORM TO: Supervisor Indicated in Section I Above.						
SEND A COPY TO: Occupational Health and Safety 1787 Summit Street						
Kent State Uni						
Kent, Ohio 442						
	Revised: April 2008					



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APPENDIX E

OSHA RESPIRATOR MEDICAL QUESTIONNAIRE FORM



Appendix C to Sec. 1910.134: OSHA Respirator Medical Evaluation Questionnaire (Mandatory)

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 KSU faculty, staff or student:

Can you read (circle one): Yes/No

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. <u>PLEASE</u> <u>COMPLETE PART A SECTION 1 AND SECTION 2 QUESTIONS 1-9 PRIOR TO</u> <u>YOUR SCHEDULED EVALUATION.</u>

Part A. Section 1. (Mandatory) The following information must be provided by every KSU faculty, staff or student 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 KSU faculty, staff or student 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 or No

- 2. Have you ever had any of the following conditions?
 - a. Seizures (fits): 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
 - 1. 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
 - 1. 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
- f. 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 (fits): 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 KSU faculty, staff or student who has been selected to use either a full-facepiece respirator or a self-contained breathing apparatus (SCBA). For KSU faculty, staff and students 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", list 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 Less than 5 hours per week: Yes/No
 - c. Less than 2 hours **per day:** Yes/No
 - d. 2 to 4 hours per day: Yes/No
 - e. 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

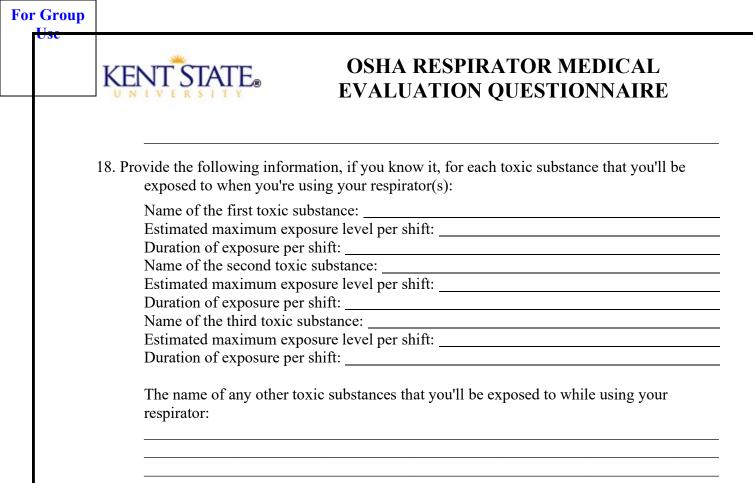
If "yes," describe this protective clothing and/or equipment:

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):



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):