Respiratory Protection Program

I. INTRODUCTION

Respirators are required in situations where engineering and administrative controls of an airborne hazard cannot be feasibly implemented. The purpose of this program is to ensure the level of respiratory protection provided to employees is appropriate to protect from respiratory hazards that cannot be otherwise controlled. This written program will ensure that the university complies with Oregon Occupational Safety and Health Administration (OR-OSHA) rule <u>1910.134</u> for employee respiratory protection.

II. <u>AUTHORITY</u>

The University of Oregon (UO) is committed to maintaining a safe and healthy work environment for all employees. This safety program is developed under the authority of <u>University Policy IV.05.01 Safety – Physical Space and Environment</u>, which requires regulatory compliance, defines responsibilities, provides for immediate suspension of certain unsafe activities, and guides corrective action procedures for recognized hazards.

University Human Resources polices, and employment contracts provide separate requirements on employee performance management and corrective action. All administrators, deans, department heads, directors, supervisors and/or principal investigators are directly accountable for the safety and health of the total environment(s) (work or living) for which they are responsible.

III. <u>SCOPE</u>

This UO respiratory protection program is established for all employees with the risk of occupational exposure to respiratory hazards and sets requirements for use of respirators at the workplace. This written program is available to any employee upon request.

Voluntary use of filtering facepiece respirators for protection against wildfire smoke is according to requirements of <u>OAR 437-002-1081</u> and is not within the scope of this program.

IV. <u>RESPONSIBILITIES</u>

Responsibilities as detailed in the program are derivative of responsibilities defined within <u>University Policy IV.05.01</u>.

A. Environmental Health and Safety (EHS)

EHS is responsible for:

1. Serving as the respiratory protection program administrator.

- 2. Conducting workplace inspection and analysis as needed to ensure program compliance.
- 3. Providing or arranging for training that meets the needs for the specific respirators issued.
- 4. Coordinating with the university's medical provider(s) for medical evaluations, if required.
- 5. Halting any operation at the UO where there is a likelihood of personal injury from respiratory hazards.
- 6. Approving purchases of all equipment and cartridges. (Program costs are the responsibility of the employee's department.)
- 7. Retaining employee occupational health records, fit test records, and training records.
- 8. Reviewing the respiratory protection program annually.
- B. Departments

Departments are responsible for:

- 1. Assuring that funding is available to pay for respirators and associated equipment, fit testing, and any required medical evaluations.
- 2. Requesting a workplace analysis from Environmental Health and Safety (EHS) to determine if a respirator will be needed to control airborne hazards not controlled by engineering and administrative controls.
- 3. Verifying that all equipment and cartridges receive approval from EHS. Departments shall not issue respiratory protection equipment but may stock replacement cartridges and respirator parts.
- C. Supervisors (Including administrators, deans, department heads, directors, and/or principal investigators) are responsible for:
 - 1. Implementing and enforcing requirements described in this written program.
 - 2. Assisting EHS with the identification of employees that must be enrolled in this program.
 - 3. Approving employee request for voluntary use of a respirators.
- D. Employees

Employees are responsible for:

- 1. Following direction provided by supervisors, the training received, and the requirements of the written program.
- 2. Inspection of their respirator prior to each use.
- 3. Notifying appropriate personnel when cartridges or other components of their respirator must be replaced.
- 4. Notifying their supervisor or EHS if they experience any difficulty in using their respirator.

- 5. Cleaning and storing the respirator consistent with program requirements and the training they received.
- 6. Employees approved for voluntary use of a respirator should be prepared to purchase the respirator. Departments are not required to provide equipment for voluntary use.
- E. Medical Provider (Includes University Health Services [UHS] or other Licensed Health Care Professional [PLHCP} contracted by the university) Medical provider is responsible for:
 - 1. Reviewing the medical history of potential respirator users, including conducting or arranging for any additional necessary medical tests.
 - 2. Advising EHS of the approval or denial of medical clearance for all potential and current respirator users.
 - 3. Retaining and maintaining medical records.

V. <u>RESPIRATOR SELECTION PROCESS</u>

- A. Before a UO employee can obtain a respirator, EHS will conduct a workplace analysis to determine if the respirator is required. The analysis may consist of any combination of the following:
 - 1. Review of Safety Data Sheets for hazardous constituents.
 - 2. Examining operations that produce air contaminants.
 - 3. Conducting an exposure assessment to determine if the contaminant concentration exceeds the permissible exposure limit (PEL)
 - 4. Consulting historic monitoring data, if available.
 - 5. Where the analysis cannot identify or reasonably estimate the employee exposure, the atmosphere shall be considered an Immediately Dangerous to Life or Health (IDLH) atmosphere.
- B. Only National Institute for Occupational Safety and Health (NIOSH) respirators will be issued when respirator use is required.
- C. Respirators and cartridges will be assigned to individuals, not to a department, shop, or group.
- D. Supplied-air or self-contained breathing apparatus (SCBA) will be provided for all IDLH atmospheres. In the case of the SCBA, a minimum service life of 30 minutes will be provided.
- E. For an air-purifying respirator used for protection against gases and vapors, where reasonable technology exists, cartridges equipped with end-of-service-life indicators will be used. When that technology does not reliably exist, an estimate of the lifetime of the cartridges for the specific work environment will be made and the cartridges will be changed upon an established schedule. That schedule will vary for each worker and will be based upon the following:
 - 1. The product(s) the worker uses.

- 2. The hazards of that product.
- 3. Historical information from the worker, based upon past similar work environments.
- 4. Any available air monitoring data.
- F. Cartridges continue to degrade through migration during non-use due to many factors including temperature and humidity. EHS will use manufacturer guidelines to assist employees on setting an appropriate cartridge change out schedule.
- G. For air purifying respirators used for protection against particulate (except for particulate at least 2 micrometers in size and situations used for comfort only), a high efficiency particulate air filter or atmosphere-supplying respirator will be used. Dust masks shall not be used to achieve compliance with air contaminates.
- H. Employees using filtering facepiece respirators (N95, P100, etc.) will be instructed to discard the mask after each use or more frequently if they notice difficulty breathing.

VI. <u>MEDICAL EVALUATION</u>

- A. Medical evaluation is required for all employees approved to use respirators, except for approved voluntary use of a filtering facepiece particulate respirator.
- B. UHS staff will serve as the Primary Licensed Health Care Provider (PLHCP) for the University. In situations where UHS cannot perform necessary services, those services will be contracted through a provider approved by EHS.
- C. EHS will issue the medical questionnaire to the affected employees and will facilitate review with the PLHCP.
- D. Questionnaires and exams will be conducted during employee work hours.
- E. Information gained by the PLHCP will remain confidential.
- F. PLHCP will advise EHS whether an employee can or cannot wear a respirator. The PLHCP may order an additional evaluation prior to making their decision on whether the employee will be approved to wear a respirator.
- G. Additional medical consultation will be provided when any one of the conditions exists:
 - 1. An employee reports medical signs or symptoms that are related to ability to use a respirator.
 - 2. The PLHCP, supervisor, or respirator program administrator determines that an employee needs to be reevaluated.
 - 3. Information from the respiratory protection program, including observations made during fit testing and program evaluations, indicates a need for employee reevaluation.

4. A change occurs in workplace conditions that may result in substantial increase in the physiological burden placed on an employee.

VII. <u>FIT TESTING</u>

- A. Fit testing will be conducted by trained EHS staff or a qualified provider prior to any issuance of a respirator and at least annually thereafter.
- B. Fit testing will be done with the same make, model, style, and size of respirator the at the employee will use. Fit tests are not required for approved voluntary use of a filtering facepiece particulate respirator.
- C. PPE (hard hat, goggles, safety glasses, etc.) or personal glasses that is expected to be worn while wearing a respirator will be worn during the fit test process.
- D. For air purifying respirators to be used in environments that do not require a fit factor greater than 100, a qualitative fit test will be performed following protocols from <u>OR-OSHA 1910.134 Appendix A</u>.
- E. For work environments that require a fit factor greater than 100, a quantitative fit test must be conducted.
- E. Additional fit testing will be conducted whenever an employee, supervisor, PLHCP, or program administrator makes visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include, and are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.
- F. Additional fit testing will be allowed if requested by the employee wearing the respirator.

VIII. <u>PROPER USE OF RESPIRATORS</u>

- A. Voluntary use of filtering facepiece or elastomeric respirator is allowed in the workplace with direct supervisor approval and according to the requirements of this written program. Voluntary use of other respirators in the workplace is not allowed.
- B. Respirator use is not permitted when facial hair interferes with the sealing surface of the facepiece and the face or interferes with valve function. When any condition exists that interferes with the tight seal of the facepiece, the employee will be instructed to leave the work environment until the situation is resolved.
- C. Other conditions, such as corrective glasses, goggles, or other personal protection equipment will be evaluated by the employee and their supervisor to ensure that the proper face seal is maintained. If the seal cannot be maintained, alternate equipment or work will be considered.
- D. All respirator users will perform a user seal check each time they don the respirator. Seal check procedures will be explained and reviewed to the employee during training per <u>Appendix B1 of OR-OSAH 1910.134</u>.
- E. If the work environment changes, follow section V. RESPIRATOR SELECTION PROCESS above to reevaluate the work environment.
- F. Employees will be instructed to leave the work area if:

- 1. Workplace changes occur during the work shift.
- 2. They detect a vapor or gas breakthrough, change in breathing resistance or leakage of the facepiece.
- 3. Anytime they need to change their cartridges or replace any piece of their respirator.
- G. Employees will wait until they are out of the air contaminated environment prior to removing their respirator.

IX. IMMEDIATELY DANGEROUS TO LIFE OR HEALTH (IDLH) ATMOSPHERES

- A. For work within IDLH atmospheres, the employee shall ensure that:
 - 1. A minimum of 1 employee is located outside the IDLH atmosphere.
 - 2. Visual, voice, or signal line communication is maintained between the employee(s) in the IDLH atmosphere, and the employee(s) located outside the IDLH atmosphere.
 - 3. Employees outside the IDLH atmosphere will be equipped with pressure demand or other positive pressure SCBAs.
- B. If a Supplied Air Respirator (SCBA or airline) is required by a department, the department must first consult with EHS to develop department specific protocols that are compliant with <u>1910.134 Respiratory Protection</u>.

X. MAINTENANCE AND CARE OF RESPIRATORS

- A. Employees will be issued respirator cleaning procedures as outlined in OR-OSHA <u>1910.134 (Appendix B-2)</u>. SCBA facepieces will be cleaned and disinfected after each use. Respirators used in fit testing and training and shall be cleaned and disinfected after each use.
- B. Respirators will be stored in such a manner as to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, damaging chemicals and other physical damage.
- C. Do not use bleach or alcohol-based products to clean respirators. Refer to and follow the manufacturer manual for cleaning, disinfecting, and storage of the respirator.
- D. Employees are required to inspect their respirator prior to each use and during cleaning. Inspections will include the following items:
 - 1. Tightness of connections.
 - 2. Function of the respirator.
 - 3. Condition of various parts including head straps, valves, cartridges and facepiece.
 - 4. A check of elastomeric parts for pliability and signs of deterioration.
- E. Any respirator found in need of repair will be taken out of service until the repairs are made. Replacement parts will be made with like pieces from the same manufacturer. Respirators that cannot be repaired will be remain out of service permanently.

- F. Escape-only respirators shall be inspected before being carried into the workplace for use.
- G. In areas requiring SCBA, a spare air cylinder will be maintained at all times. SCBA will be inspected monthly, according to the manufacturer's specifications.
- H. Only qualified technicians will make repairs on the SCBA.

XI. **EMPLOYEE TRAINING**

- A. Employees will be trained in the routine and emergency use of respirators.
- B. Training will include:
 - 1. Donning and doffing
 - 2. Limitations of respirator
 - 3. Maintenance
 - 4. Cleaning
 - 5. Inspection
 - 6. Storage of respirator
- C. Training will be conducted prior to the first potential exposure and will recur at least annually.
- D. Retraining will occur if the work environment changes, or if the supervisor, PLHCP, program administrator or the employee determines that the employee needs retraining.
- E. Employees approved for voluntary use of a filtering facepiece or elastomeric respirator are trained in the use and maintenance of the respirator and are given a copy of OR-OSHA Appendix D.

XII. RECORDKEEPING

- A. Records of the medical evaluations under this program will be maintained by the PLHCP for the duration of employment plus 30 years.
- B. Training records will be maintained by EHS.
- C. Fit test records will include: the name of the employee, type of fit test performed, the make, model, style, and size of the respirator tested, date tested and the pass/fail results of the qualitative fit test. Fit test records will be retained by EHS until the next fit test is administered.
- D. EHS will retain a copy of the respirator program and will be responsible for reviewing the program annually.

XIII. **APPENDICES**

Appendix A – Definitions

Appendix B – Oregon OSHA respirator Cleaning Procedures (Mandatory) Appendix C – Voluntary Use Forms

XIV. DOCUMENTATION

Original Preparation Date: 1991 Latest Revision Date: July 15, 2024 UNIVERSITY OF OREGON

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