

Respiratory Protection Program Safety Standard

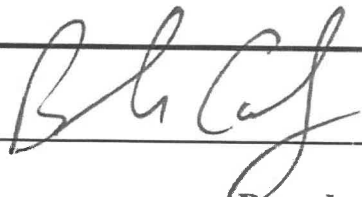
Colorado Springs School District 11

SAFETY STANDARD

Respiratory Protection Program

- 1. This Safety Standard was developed by the Safety Office, Risk Related Activities Department.**
- 2. A technical review and content acceptance was performed by:**
 - **Director of Facilities**
 - **Assistant Director of Facilities**
 - **Risk Manager, Risk Related Activities Department**
 - **Environmental and Life Safety Supervisor**
 - **Construction Shop Supervisor**
- 3. This Safety Standard was reviewed and accepted by the Director, Risk Related Activities Department.**

Approved:



Date:

2/15/24

Brandon Comfort
Chief Resource Officer

Respiratory Protection Program Safety Standard

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Respiratory Protection Program Safety Standard

Purpose and Scope:

The purpose of this safety standard is to provide employees of Colorado Springs School District 11 with procedures to protect employee health and safety, and to comply with federal, state, and local requirements when employees voluntarily wear or are required to wear air-purifying respirators.

This standard and included procedures apply to all employees who are required to wear respirators during normal work operations, and during some non-routine or emergency operations due to an occupational exposure to potentially hazardous airborne contaminants (harmful dusts, fogs, fumes, mists, gases, smokes, sprays or vapors).

Additionally, any employee who voluntarily wears a respirator when one is not required based on exposure levels or District mandate is subject to certain parts of this program.

Regulatory Reference:

- OSHA Standards 29CFR1910.132 Personal Protective Equipment; 1910.134 Respiratory Protection; and 29CFR1910.1001 Asbestos
- Asbestos Hazard Emergency Response Act (AHERA)
- ANSI Standard Z88.2-2015 Respiratory Protection Standard
- Applicable Federal, state, and local laws and requirements

Responsibilities:

Risk Related Activities Department:

- Assist the program administrator as needed with program evaluation and accountability.
- Provide assistance to locations in the implementation of this standard.
- Spot check employees for compliance with this standard.

Facilities Department:

- Administer the overall program and hold employees within the District accountable for compliance with this standard.
- Ensure budget support is given to all program requirements.
- Train, as needed or requested, on the use, care, and maintenance of respirators.
- Spot check employees for compliance with this standard.
- Provide respirators when required to affected employees.
- Ensure selected respirator models meet required sizes, sufficient numbers are on hand, and is appropriate for the environmental conditions and approved by the program administrator.
- Administer this standard and written Respiratory Protection Safety Standard.

District 11 Schools and Other Buildings:

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- School Principals, Assistant Principals, and designated Building Administrators are responsible to ensure compliance with this standard in the schools which supervisory and operational responsibility has been designated.
- Affected employees will use the respiratory protection in accordance with instructions and training received, will guard against damage to the respirator, will immediately report damaged or suspected problems to the program administrator, and are responsible for complying with this safety standard.

Procedures:

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.

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 face piece only when a negative pressure is created inside the face piece 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.

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

Filtering face piece (dust mask): A negative pressure particulate respirator with a filter as an integral part of the face piece or with the entire face piece composed of the filtering medium.

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Fit factor: A quantitative estimate of the fit of a particular 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 National Institute for Occupational Safety and Health (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 or enclosed structures which are involved in a fire situation beyond the incipient stage.

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

Negative pressure respirator (tight fitting): A respirator in which the air pressure inside the face piece is negative during inhalation and 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: 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 the respiratory protection standard.

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

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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 face piece when the positive pressure is reduced inside the face piece by inhalation.

Qualitative fit test (QLFT): A pass or fail fit test to assess the adequacy of respirators 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.

Respiratory inlet covering: The 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 face piece, 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.

Tight-fitting face piece: 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.

PROGRAM DESCRIPTION AND REQUIREMENTS

- This written respirator protection program document has been developed, implemented, and will be maintained to address specific requirements and procedures essential to employee safety and work practices.
- Components of this safety standard include, but not limited to, the following:
 - Selection and use based on the identification and evaluation of the respiratory hazard.
 - Medical fitness for employees to confirm a respirator can safely be worn and used.

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- Equipment maintenance to ensure the respirator itself does not pose a hazard to the employee.
 - Employee training to heighten safety awareness and to ensure the employee is safely using the proper respirator.
 - Equipment fit testing with either qualitative or quantitative methods, based on known exposure levels.
 - Employee participation in the formal program evaluation and identification of improvements or changes.
- The Environmental and Life Safety Supervisor is responsible for the program administration as described within the respiratory protection program document.
 - The Director of Facilities is responsible for the overall program administration and accountability and ensure budget support is given to all program requirements.
 - The Safety Manager in the Risk Related Activities Department will assist the program administrator as needed with program evaluation and accountability.

WRITTEN PROGRAM

- Colorado Springs School District 11 has developed, implemented, and will maintain a written respiratory protection program addressing procedures and elements required for respirator use. The program is being administered by the Environmental and Life Safety Supervisor hereinafter referred to as the Program Administrator, who will re-evaluate the written program:
 - On an annual basis, or
 - If changes or events occur that require a revision, or
 - If operational changes occur that require a revision.
- The respiratory protection program applies to all Colorado Springs School District 11 employees. The safety standard document is available to all employees, with a primary intent of identifying and communicating program goals and objectives.

MINIMUM PROGRAM ELEMENTS

This program will include the following minimum elements:

- Procedures for selecting respirators for use in the workplace.
- Medical evaluations of employees required to use respirators.
- Fit testing procedures for tight-fitting respirators.
- Procedures for proper use of respirators in foreseeable emergency situations.
- Procedures and schedules for cleaning, disinfecting, storing, inspecting, repairing, discarding, and otherwise maintaining respirators.

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- Procedures to ensure adequate air quality, quantity, and flow of breathing air for atmosphere-supplying respirators.
- Training of employees in the respiratory hazards to which they are potentially exposed during routine and emergency situations.

GENERAL INFORMATION

- Engineering controls are designed to control and/or minimize the threat of occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. The primary objective of this program will be to prevent atmospheric contamination, and this will be accomplished when possible, by using accepted engineering control measures (i.e. enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not possible, or while they are being established, appropriate respirators will be used.
- When an exposure cannot be identified or reasonably estimated, the atmosphere in the area or location will be deemed immediately dangerous to life or health (IDLH). District employees **will not** work in IDLH or oxygen-deficient atmospheres, or in a gaseous or vaporous atmosphere.
- NIOSH certified respirators will be used. The respirator furnished will provide adequate respiratory protection against the particular hazard for which it is designated.
- Employees will receive training in the proper use of respirators and their laminations.
- Respirators will be regularly cleaned, disinfected, and inspected by the employee using the respirator. Worn or deteriorated parts shall be replaced.
- Respirators shall be stored in a convenient, clean, and sanitary location.
- The program administrator shall perform:
 - Observations of work area conditions and degree of employee exposure or stress, and
 - A regular evaluation to determine program effectiveness.
- Employees will not be assigned to tasks requiring use of respirators unless a physician has determined they are physically able to perform the work and use the equipment. The medical status for all employees participating in this program shall be reviewed on an annual basis.

EMPLOYEE INVOLVEMENT

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- The District will regularly consult employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Problems or concerns identified during this assessment will be investigated and corrective actions taken as required.
- The Environmental and Life Safety Supervisor is designated as the program administrator and will conduct the program evaluations. The program factors to be assessed include, but not limited to:
 - Respirator fit (including the ability to use the respirator without interfering with effective work area performance).
 - Appropriate respirator selection for the hazards to which the employee is exposed.
 - Proper respirator use in the work area and the conditions encountered.
 - Proper respirator maintenance.
 - Employee proficiency and compliance required by this program.
 - The Director of Facilities and/or the Assistant Mechanical Engineer will certify that employee training has been accomplished. Written certification will be maintained and contain:
 - The employee's name and employee ID number.
 - Signature of the trainer(s).
 - The date(s) of training.
 - The written certification will be available for inspection by employees.

HAZARD EVALUATION

Environmental Services shall develop and maintain a Job Hazard Analysis Program to identify and evaluate respiratory hazards. This evaluation will include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form.

Respirators for atmospheres that are not IDLH:

- The District will provide a respirator that is appropriate to protect the health of the employee, under routine and reasonably foreseeable emergency situations.
- Respirators for protection against asbestos particulates will either be:
 - An atmosphere-supplying respirator or
 - An air-purifying respirator equipped with a filter certified by NIOSH as a high efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH.
- For contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least 2 micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH.

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RESPIRATOR SELECTION PROCESS

- District 11 will allow employees to select respirators from a sufficient number of respirator models and sizes.
- The selection process will ensure a respirator is acceptable to and correctly fits the employee.
- Selection of respirators will be made according to the specific hazard involved and in accordance with the manufacturer's instructions or other related requirements.
- Asbestos required filter cartridges and canisters (P11 Magenta Filter cartridges and canisters) shall be used and stored according to manufacturer's guidelines.
- District 11 will ensure that all filters, cartridges and canisters use are labeled, and color coded with the NIOSH approved label and that the label is not removed and remains legible. Any assigned task or job having a potential for respiratory hazards will be evaluated by the Environmental and Life Safety Supervisor **prior** to any work being done to determine if employee respiratory protection is required.

USE OF RESPIRATORS

- District 11 will ensure that any employee using a respirator is medically able to use that respirator, and that the respirator is cleaned, stored, and maintained so that its use does not present a health hazard to the employee.
- District 11 will provide respirators, training, and medical evaluations at no cost to the employee.
- There are five conditions under which respirators **must be used**:
 - Known and regulated areas within a District facility.
 - In emergencies.
 - Where engineering and work practice controls are inadequate.
 - Where exposures exceed permissible limits.
 - During maintenance and repair activities or brief or intermittent operations where engineering and work practice controls are not feasible or required.
- This document will specify standard procedures for respirator use.
- The correct respirator will be specified for each work, task, or project. The respirator type will be specified in the work procedures by the program administrator. The individual issuing them will be adequately instructed to ensure that the correct respirator is issued.

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- Every respirator wearer will receive fitting instructions including demonstrations and practice on how the respirator should be worn, adjusted, and properly fitted. Respirators will not be worn when conditions prevent a good face seal. Such conditions may be a growth of beard, sideburns, a skull cap that projects under the face piece, jewelry, or temple pieces on glasses. Also, the absence of one or both dentures can seriously affect the fit of a face piece and interfere with the face-to-face piece seal or valve function.
- The face piece fit will be checked by the employee each time he/she puts on the respirator. This will be in accordance with the manufacturer's face piece fitting instruction.
- Periodic checks of employees wearing respirators will be accomplished by the program administrator to assure proper protection. This will be done in accordance with the manufacturer's face piece fitting instructions.
- If hair growth or apparel interferes with a satisfactory fit, then they must be altered or removed to allow a satisfactory fit.
- Full-face respirators having provisions for optical inserts will be reviewed for use by the District and will be used according to the manufacturer's specification. When employees must wear optical inserts as part of the face piece, the face piece and lenses will be fitted by assigned individuals to provide good vision, comfort, and a gas-tight seal.
- Conventional eyeglasses will not be used with full-face respirators. A proper seal cannot be established if the temple bars of eyeglasses extend through the sealing edge of the full-face piece.
- Contact lenses will not be used with full-face respirators. Wearing of contact lenses in contaminated atmospheres with a respirator **will not be allowed.**
- If corrective glasses or goggles are required, they shall be worn so as not to affect the fit of the face piece. Proper selection of equipment will minimize or avoid this problem.
- If an employee wears corrective glasses, goggles or other personal protective equipment, the equipment must be worn in a manner that does not interfere with the seal of the face piece to the face of the user.
- The following procedures must be performed to ensure that an adequate seal is achieved each time the respirator is put on. Either the positive and/or negative pressure checks listed below shall be performed, or the respirator manufacturers recommended user seal check method is to be used:

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- **Positive pressure check:** Close off the exhalation valve and exhale gently into the face piece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the face piece without any evidence of outward leakage of air at the seal. For most respirators this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.
- **Negative pressure check:** Close off the inlet opening of the canister or cartridge(s) by covering with the palm of the hand(s) or by replacing the filter seal(s), inhale gently so that the face piece collapses slightly, and hold the breath for ten (10) seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the face piece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.
- The respirator manufacturer's recommended procedures for performing a user seal check may be used instead of the positive and/or negative pressure check procedures provided that it can be demonstrated that the manufacturer's procedures are equally effective.

CONTINUING RESPIRATOR EFFECTIVENESS

- Appropriate evaluations of work area conditions and degree of employee exposure or stress will be accomplished. When there is a change in work area conditions or degree of employee exposure or job stress that may affect respirator effectiveness, the program administrator will re-evaluate the continued effectiveness of the respirator.
- The program administrator will ensure that employees leave the respirator use area under the following conditions:
 - To wash their faces and respirator face pieces as necessary to prevent eye or skin irritation associated with respirator use.
 - If they detect vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece.
 - To replace the respirator or the filter, cartridge, or canister elements. If the employee detects vapor or gas breakthrough, changes in breathing resistance, or leakage of the face piece, District 11 must replace or repair the respirator before allowing the employee to return to the work area.

TRAINING PROGRAM

- The Environmental Life Safety Office will develop a standardized training course to meet the requirement for a respiratory protection training program. The training will be comprehensive, clear and as a minimum will be presented on an annual basis.

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- If an employee is able to demonstrate that he or she has received training within the prior 12 months, the employee will not be required to repeat the training provided knowledge can be presented and demonstrated to the program administrator. In this circumstance, training by the District must be provided not later than 12 months from the date of the previous training.
- The Environmental Services Office will conduct evaluations of the work area to ensure the written respiratory protection program is being properly implemented. Employees will be consulted to determine and ensure that they are using their respirators properly.
- The Environmental Services Office will conduct program evaluations as necessary to ensure the provisions of this written program are being effectively implemented.
- Training will be provided to each designated employee:
 - Before the employee is first assigned duties that require respiratory protection.
 - Before there is a change in assigned duties.
 - Whenever there is a change in operations that present a potential hazard for which an employee has not previously been trained.
 - Whenever the District has reason to believe there are deviations from established respiratory procedures required by this instruction, or inadequacies in the employee's knowledge or use of these procedures.
- Training of employees as a minimum will include:
 - Putting on and removing respirators (donning and doffing).
 - All limitations on their use.
 - Maintenance requirements.
 - Procedures used for regular evaluations of the program.
 - Where respirator use is not required.
- The program administrator will ensure that each employee can demonstrate knowledge of the following:
 - Why the respirator is necessary and how improper fit, usage or maintenance can compromise the protective effect of the respirator.
 - What the limitations and capabilities of the respirator are.
 - How to use the respirator correctly 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.
 - How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.

RETRAINING AND REFRESHER TRAINING

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- Retraining will be administered annually and will re-establish employee proficiency and introduce new or revised control methods and procedures, as necessary.
- As a minimum, retraining will be administered should the following situations occur:
 - Changes in the work area or the type of respirator required render previous training obsolete.
 - Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the necessary understanding or skills.
 - Any other situation arises in which retraining appears necessary to ensure safe respirator use.

INSPECTION, MAINTENANCE AND CARE OF EQUIPMENT

- The District will provide materials for cleaning, disinfecting, storage, inspection and repair of respirators. Employees will ensure that respirators are cleaned and disinfected using procedures recommended by the respirator manufacturer. Equipment will be properly maintained to retain its original state of effectiveness.
- Respirators will be cleaned and disinfected at the following intervals:
 - Respirators issued for **the exclusive use of an employee** will be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.
 - Respirators maintained **for emergency use** will be cleaned and disinfected after each use.
 - Respirators used in **fit testing and training** will be cleaned and disinfected after each use.
- All respirators will be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. They will be packed or stored to prevent deformation of the face piece and exhalation valve.
- Respirators **used in routine situations** will be inspected by the employee before each use. 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.
- Respirators that fail an inspection or are otherwise found to be defective will be removed from service and discarded, repaired, or adjusted only by persons appropriately trained to perform such operations. Only the respirator manufacturer's NIOSH-approved parts, designed for the specific respirator, will be used.
- Frequent random inspections will be conducted by the Environmental Department to assure that respirators are properly selected, used, cleaned, and maintained. The respirator manufacturer's inspection criteria will be used as the basis for the inspections. Inspection records will be maintained in the Environmental Services Office.

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- Routinely used respirators, such as dust respirators, may be placed in plastic bags. Respirators having removable cartridges with imbedded compounds that could evaporate into a sealed bag should be removed so as not to permeate into the rubber parts of the respirator. Respirators should not be stored in such places as lockers or toolboxes unless they are in carrying cases or cartons.

RESPIRATOR FIT TESTING

- Prior to any employee using a respirator, the District will conduct fit testing with the same make, model, style and size of respirator that will be used by the employee.
- The program administrator will establish a record of the qualitative and quantitative fit tests administered to an employee including:
 - Date of test.
 - Type of fit test performed.
 - The name or identification of the employee tested.
 - Specific make, model, style, and size of respirator tested.
 - Fit test records will be retained for respirator users until the next fit test is administered.
- The program administrator will ensure that an employee using a tight-fitting face piece respirator is fit tested:
 - Prior to initial use of the respirator.
 - Whenever a different face piece (size, style, make or model) is used.
 - At least annually thereafter.
- The program administrator will conduct an additional fit test whenever changes in the employee's physical condition occur that could affect respirator fit. Such conditions include, but not limited to:
 - Facial scarring
 - Dental changes.
 - Cosmetic surgery.
 - An obvious change in body weight.

MEDICAL EVALUATION

- Using a respirator may place a physiological burden on employees that varies with the type of respirator worn, the job and workplace conditions in which the respirator is used, and the medical status of the employee. Prior to an employee being fit tested or using a respirator in a work area, the program administrator will schedule the employee to receive a medical evaluation by a medical provider that will be selected by the District. The evaluation will be used to verify an employee's ability to safely use a respirator.

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- The District may discontinue an employee's medical evaluations if the employee is no longer required to use a respirator.
- The program administrator will ensure a follow-up medical examination is provided for an employee who gives a positive response to any question on the medical questionnaire, and/or demonstrates the need for a follow-up examination. If required, the follow-up examination will include any medical tests, consultations, or diagnostic procedures that the medical provider considers necessary to make a final determination.
- All medical services are confidential and will be administered during the employee's normal working hours, or a time agreed upon by the program administrator, the employee and the employee's supervisor. At any time requested, an employee will have an opportunity to discuss examination results with the medical provider.
- The medical provider will be provided with specific work requirements and information including, but not limited to:
 - The expected physical work effort.
 - Additional protective clothing and equipment to be worn and used.
 - Temperature and humidity extremes that may be encountered.
 - The type and weight of the respirator to be used by the employee.
 - The duration and frequency of respirator use, including use for rescue and escape.
 - Any supplemental information provided previously to the medical provider.
 - A copy of the written respiratory protection program.
- If the District changes the authorized medical provider, the District will ensure the new authorized provider receives the information as described above. Employees will not have to be medically re-evaluated solely because of such a change.
- In determining the employee's ability to use a respirator, the program administrator and the authorized medical provider will accomplish the following:
 - Obtain a written recommendation regarding the employee's ability to use the respirator.
 - Determine any limitations on respirator use related to any identified medical condition of the employee or relating to the workplace conditions in which the respirator will be used.
 - Determine if there is a need for follow-up medical evaluations.
 - Ensure the employee has been provided with the authorized medical provider's written recommendation(s).
 - If the medical provider identifies a medical condition that may place an employee's health at risk by using a negative pressure respirator, following acceptance and approval by the medical provider, the District will provide a powered air-pressure respirator (PAPR). If a later medical evaluation finds an

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employee medically able to use a negative pressure respirator, the District will no longer provide a PAPR.

- As a minimum, the District will provide additional medical evaluations based on the following conditions:
 - If an employee reports medically related complaints or symptoms that are associated to his or her ability to use a respirator.
 - If a medical provider, supervisor, or the program administrator identifies a need for re-evaluation to include observations made during fit testing or other program evaluations which indicates the need for a re-evaluation.
 - If a change occurs in the work area conditions (i.e., physical work effort, protective clothing, or temperature) that may result in a substantial increase in the physiological burden placed on an employee.

RESPIRATORY PROTECTION PROGRAM FORMS

All necessary forms for the maintenance of this safety standard are listed in the following Appendices:

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APPENDIX A – RESPIRATOR ASSIGNMENT RECORD

Employee Data	
Employee Name:	Employee Number:
Department:	Position:
Exposure Duration and Frequency:	

Respirator Data					
	Type	Filter Element	Manufacturer & Model	Facepiece & Size	
1					
2					
3					
For Gas/Vapor Air-Purifying Respirators: Frequency of Filter/Cartridge/Disposable Respirator Change					
<input type="checkbox"/> Hourly <input type="checkbox"/> 2X's/Shift <input type="checkbox"/> Daily <input type="checkbox"/> Weekly <input type="checkbox"/> After Each Use					

Respirator Wearer Training Record			
Subject Checklist			
<input type="checkbox"/> Need for respirator and how improper fit, use or care degrade protection <input type="checkbox"/> Respirator's limitations and capabilities <input type="checkbox"/> Effective respirator uses in emergencies or respirator malfunctions <input type="checkbox"/> How to inspect, put on, remove, use, and check the seals of a respirator <input type="checkbox"/> Respirator maintenance and storage procedures <input type="checkbox"/> Recognizing medical signs and symptoms limiting or preventing effective respirator use			
Training Date	Training Provided By	Knowledge Demonstrated By	Wearer's Signature

GUIDELINES FOR THE EMPLOYEE RESPIRATOR ASSIGNMENT & TRAINING RECORD

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USE – The Respirator Assignment and Training record is used to document the assignment of respirators and the training of respirator wearers and supervisor, as recommended in ANSI Z88.2 and required by OSHA regulations. An individual record can be used to assign up to three respirators for each employee. To meet the annual training requirement in ANSI Z88.2 and certain OSHA regulations, a new record is completed each year.

- a. **Employee Data** – Enter the employee’s name, department, and job title.
- b. **Respirator Data** – For one, two, or three respirators, enter the following:
 - 1) **TYPE** – Enter the class of respirator using the following:
 - i. APR – Air Purifying Respirator
 - ii. PAPR – Powered Air Purifying Respirator
 - iii. SAR – Supplied Air Respirator
 - iv. SCBA – Self Contained Breathing Apparatus
 - 2) **FILTER ELEMENT** – For air purifying respirators, enter the containment(s) that the respirator is approved for. Also indicate the frequency. Also, indicate the frequency of filter/cartridge replacement, or for disposable respirators, respirator replacement.
 - 3) **MANUFACTURER AND MODEL**
 - i. **Facepiece and size** – Enter the facepiece type and size.
 - ii. **Date assigned** – Enter the date the respirator was first assigned.
- c. **Respirator Wearer Training Record** – For the corresponding respirators assigned, enter the training date, the name of the individual(s) providing the training, and the signature of the respirator wearer.

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APPENDIX B – RESPIRATOR INSPECTION RECORD

Name:	Employee #:	Date:			
Type of Respirator	Inspection Items	Yes	No		
Filtering Facepiece Respirator	Holes/tears in filter.	<input type="checkbox"/>	<input type="checkbox"/>		
	Deterioration or loss of elasticity in straps.	<input type="checkbox"/>	<input type="checkbox"/>		
	Deterioration of metal nose clip.	<input type="checkbox"/>	<input type="checkbox"/>		
Air-Purifying Respirator (APRs)	Clean face piece.	<input type="checkbox"/>	<input type="checkbox"/>		
	Cracks, tears, or holes in rubber.	<input type="checkbox"/>	<input type="checkbox"/>		
	Distortion of face piece.	<input type="checkbox"/>	<input type="checkbox"/>		
	Cracked, scratched, or loose-fitting lenses in face piece.	<input type="checkbox"/>	<input type="checkbox"/>		
	Breaks or tears in head straps.	<input type="checkbox"/>	<input type="checkbox"/>		
	Loss of elasticity in head straps.	<input type="checkbox"/>	<input type="checkbox"/>		
	Broken or malfunctioning buckles or attachments in head straps.	<input type="checkbox"/>	<input type="checkbox"/>		
	Dust particles, dirt, or detergent residue on valves and valve seat.	<input type="checkbox"/>	<input type="checkbox"/>		
	Cracks, tears, distortion, or loss of flexibility in valve material.	<input type="checkbox"/>	<input type="checkbox"/>		
	Cracks or flexibility of valve seats.	<input type="checkbox"/>	<input type="checkbox"/>		
	Missing or defective valve covers.	<input type="checkbox"/>	<input type="checkbox"/>		
	Proper filter for the hazard.	<input type="checkbox"/>	<input type="checkbox"/>		
	Approval designation on filter.	<input type="checkbox"/>	<input type="checkbox"/>		
	Missing or worn gaskets on filters.	<input type="checkbox"/>	<input type="checkbox"/>		
	Worn threads on filter and face piece.	<input type="checkbox"/>	<input type="checkbox"/>		
	Cracks or dents in filter housing.	<input type="checkbox"/>	<input type="checkbox"/>		
	Cartridge gaskets in place.	<input type="checkbox"/>	<input type="checkbox"/>		
	Deterioration of cannister harness.	<input type="checkbox"/>	<input type="checkbox"/>		
	Service life indicator present, or end of service date noted.	<input type="checkbox"/>	<input type="checkbox"/>		
	Date filters installed.	<input type="checkbox"/>	<input type="checkbox"/>		
Powered Air-Purifying Respirators (PAPRs)	Tears, holes, or cracks in breathing tube.	<input type="checkbox"/>	<input type="checkbox"/>		
	Tears or holes in hood.	<input type="checkbox"/>	<input type="checkbox"/>		
	Charging unit is functional.	<input type="checkbox"/>	<input type="checkbox"/>		
	HEPA filter present and changed as needed.	<input type="checkbox"/>	<input type="checkbox"/>		

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Type of Respirator	Inspection Items	Yes	No
Supplied-Air Respirators (SARs) and Self-Contained Breathing Apparatuses (SCBAs)	Clean face piece.	<input type="checkbox"/>	<input type="checkbox"/>
	Exhalation valve allows air to exit mask and not enter.	<input type="checkbox"/>	<input type="checkbox"/>
	Regulator functions properly.	<input type="checkbox"/>	<input type="checkbox"/>
	Straps, buckles, and back plate in good condition.	<input type="checkbox"/>	<input type="checkbox"/>
	Low pressure hose in working condition.	<input type="checkbox"/>	<input type="checkbox"/>
	Cylinder pressure (PSI) is accurate and in working condition.	<input type="checkbox"/>	<input type="checkbox"/>
	Harness gauge pressure functions properly.	<input type="checkbox"/>	<input type="checkbox"/>
	Cylinder valve knob functions correctly.	<input type="checkbox"/>	<input type="checkbox"/>
	Leaks or other problems in purge valve.	<input type="checkbox"/>	<input type="checkbox"/>
	PASS alarm present and working.	<input type="checkbox"/>	<input type="checkbox"/>
	Cylinder fully charged.	<input type="checkbox"/>	<input type="checkbox"/>
Additional Comments:			

Respiratory Protection Program Safety Standard

APPENDIX C – Qualitative Fit Test Form

Employee Name:	Date of Birth:	Height:	Weight:
Supervisor's Name:			

A respirator fit test must be completed by an individual trained in respiratory fit testing procedures. **This fit test is required annually.**

Does employee wear glasses? ☐ Yes ☐ No

Does employee have facial hair, dentures or other attributes that will prevent a positive face fit?
☐ Yes ☐ No

Respirator Type (Make Model and Certification Number)			
Testing Media			
Compatible with eyeglasses	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No
Positive pressure fit test	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Negative pressure fit test	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Head Stationary Normal Breathing (60 seconds)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Head Turning Side to Side (60 seconds)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Head Moving Up and Down (60 seconds)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Talking (60 seconds)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Bending Over (60 seconds)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Head Stationary Normal Breathing (60 seconds)	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail
Respirator fit test results	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail	<input type="checkbox"/> Pass <input type="checkbox"/> Fail

Based on information provided on this form, I certify that the employee named on this form can wear the respiratory protective equipment listed above.

Signature of Person Administering Test: _____ Date: _____

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APPENDIX D – RESPIRATOR MEDICAL CLEARANCE FORM

The Asbestos Hazard Emergency Response Act (AHERA) requires that a person be medically evaluated by a physician or other licensed health care professional to determine whether, and under what conditions, an employee can safely wear a respirator. This form allows your physician or other licensed health care professional to indicate whether you are medically cleared to safely wear a respirator in the course of your work without disclosing confidential medical information.

To be completed after a medical evaluation that includes review of the AHERA Respirator Medical Evaluation Questionnaire

To be completed by the Respirator User:

Name: _____

Employee ID #: _____

Department: _____

Phone #: _____

Email: _____

To be completed by a physician or other licensed healthcare professional:

I have performed a respirator medical evaluation, including review of the individual's AHERA Medical Evaluation Questionnaire.

The identified individual is approved to wear (check all that apply):

- N95 particulate respirator ☐ Without restrictions ☐ With restrictions _____
- Half-mask, air-purifying respirator ☐ Without restrictions ☐ With restrictions _____
- Full-face, air-purifying respirator ☐ Without restrictions ☐ With restrictions _____
- Powered air-purifying respirator ☐ Without restrictions ☐ With restrictions _____

If applicable, the following workplace conditions will result in additional physiological burden: _____

- Follow-up medical evaluation is required if ANY of the following occur prior to approval:
 - A "yes" response to any question in the medical evaluation form was provided by the above identified individual; or,
 - The initial medical examination demonstrates the need for a follow-up medical examination.

☐ This user **is approved** to wear a respirator.

Approval date: _____

☐ This user **is not approved** to wear a respirator.

I have provided the above identified individual a copy of this form: ☐ Yes ☐ No

Physician or Other Licensed Healthcare Professional:

Printed Name: _____ Signature: _____

Company Name: _____ Date: _____

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APPENDIX E – SELECTION OF RESPIRATOR FORM

Chemical Name	State of Matter	Air Concentration Level	IDLH (Immediately Dangerous to Life or Health) Value	OEL (Occupational Exposure Limit) Value	Hazard Ratio	MUC (Maximum Use Concentrations) (If applicable)	Respirator Recommended

Respirator(s) Selected:

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APPENDIX F – Respirator Cartridge Change Out Schedule/Log

Employees shall use the following log form to determine when respirator cartridges have reached their end of service and shall be replaced with a new cartridge.

Cartridge Change-Out Information				
Date	Amount of Time Respirator Worn	Total Time (Cumulative) Respirator Worn	Where Respirator Worn	Product/Chemical Protected Against

Each time the respirator is used, record the time it was used under the “Amount of Time Respirator Worn”, and add that time to the “Total Time” column.

Replace cartridge after a maximum of 30 hours of use.

For specific information regarding respirator use and cartridge selection contact the Environmental Life Safety Office of Facilities at either 719-477-6021 or 719-719-477-6023.

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APPENDIX G – MEDICAL EVALUATION QUESTIONNAIRE

Name: _____ Date: _____

Age: _____ Sex: _____ Height: _____ Weight: _____

Job Title: _____ Phone Number: _____

Type(s) of respirators you will be wearing? (Check all that apply)

- ☐ APR – Air Purifying Respirator ☐ PAPR – Powered Air Purifying Respirator
☐ SAR – Supplied Air Respirator ☐ SCBA – Self Contained Breathing Apparatus

Have you worn a respirator before? ☐ Yes ☐ No

If “Yes” what type(s):

Part A. Required by all employees who wear a respirator.

Do you currently smoke tobacco, or have you smoked tobacco in the past month? ☐ Yes ☐ No

Have you ever had any of the following conditions?

- | | |
|--|--|
| Seizures? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Diabetes? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Allergic reactions that interfere with your breathing? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Claustrophobia? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Trouble smelling odors? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

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

- | | |
|--------------------------------|--|
| Asbestosis? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Asthma? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Chronic Bronchitis? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Emphysema? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Pneumonia? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Tuberculosis? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Silicosis? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Pneumothorax (collapsed lung)? | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Lung Cancer? | <input type="checkbox"/> Yes <input type="checkbox"/> No |

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Broken Ribs? ☐ Yes ☐ No

Any chest injuries or surgeries? ☐ Yes ☐ No

Any other lung problem that you've been told about? ☐ Yes ☐ No

Do you currently have any of the following symptoms of pulmonary or lung disease?

Shortness of breath? ☐ Yes ☐ No

Shortness of breath when walking fast on level ground or walking up a slight hill or incline? ☐ Yes ☐ No

Shortness of breath when walking at your own pace on level ground? ☐ Yes ☐ No

Must stop for breath when walking at your own pace on level ground? ☐ Yes ☐ No

Shortness of breath when washing or dressing yourself? ☐ Yes ☐ No

Shortness of breath that interferes with your job? ☐ Yes ☐ No

Coughing that produces phlegm? ☐ Yes ☐ No

Coughing that wakes you early in the morning? ☐ Yes ☐ No

Coughing that occurs mostly when you are lying down? ☐ Yes ☐ No

Coughing up blood in the past month? ☐ Yes ☐ No

Wheezing? ☐ Yes ☐ No

Wheezing that interferes with your job? ☐ Yes ☐ No

Chest pain when you breath deeply? ☐ Yes ☐ No

Any other symptoms that you think may be related to lung problems? ☐ Yes ☐ No

Have you ever had any of the following cardiovascular or heart problems?

Heat Attack? ☐ Yes ☐ No

Stroke? ☐ Yes ☐ No

Angina? ☐ Yes ☐ No

Heart Failure? ☐ Yes ☐ No

Swelling in your legs or feet (not caused by walking)? ☐ Yes ☐ No

Heart Arrhythmia (irregular heart beat)? ☐ Yes ☐ No

High Blood Pressure? ☐ Yes ☐ No

Any other heart problem that you've been told about? ☐ Yes ☐ No

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

Frequent pain or tightness in your chest? ☐ Yes ☐ No

Pain or tightness in your chest during physical activity? ☐ Yes ☐ No

Pain or tightness in your chest that interferes with your job? ☐ Yes ☐ No

In the past two years, have you noticed your heart skipping or missing a beat?

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- Heartburn or indigestion that is not related to eating? ☐ Yes ☐ No
- Any other symptoms that you think may be related to heart or circulation problems? ☐ Yes ☐ No
- ☐ Yes ☐ No

Do you currently take medications for any of the following problems?

- Breathing or lung problems? ☐ Yes ☐ No
- Heart trouble? ☐ Yes ☐ No
- Blood pressure? ☐ Yes ☐ No
- Seizures? ☐ Yes ☐ No

If you've used a respirator previously, have you ever had any of the following problems? If you've never used a respirator, select "N/A"

- Eye irritation? ☐ Yes ☐ No ☐ N/A
- Skin allergies or rashes? ☐ Yes ☐ No ☐ N/A
- Anxiety? ☐ Yes ☐ No ☐ N/A
- General weakness or fatigue? ☐ Yes ☐ No ☐ N/A
- Any other problem that interferes with your use of a respirator? ☐ Yes ☐ No ☐ N/A

Would you like to talk to the healthcare professional who will review this questionnaire about your answers to the questionnaire? ☐ Yes ☐ No

Have you ever lost vision in either eye (temporarily or permanently)? ☐ Yes ☐ No

Do you currently have any of the following vision problems?

- Wear contact lenses? ☐ Yes ☐ No
- Wear glasses? ☐ Yes ☐ No
- Color blindness? ☐ Yes ☐ No
- Any other eye or vision problem? ☐ Yes ☐ No

Have you ever had an injury to your ears, including a broken ear drum? ☐ Yes ☐ No

Do you currently have any of the following hearing problems?

- Difficulty hearing? ☐ Yes ☐ No
- Wear a hearing aid? ☐ Yes ☐ No
- Any other hearing or ear problem? ☐ Yes ☐ No

Have you ever had a back injury? ☐ Yes ☐ No

Do you currently have any of the following musculoskeletal problems?

- Weakness in any of your arms, hands, legs, or feet? ☐ Yes ☐ No
- Back pain? ☐ Yes ☐ No

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- Difficulty fully moving your arms and legs? ☐ Yes ☐ No
- Pain or stiffness when you lean forward or backward at the waist? ☐ Yes ☐ No
- Difficulty fully moving your head up or down? ☐ Yes ☐ No
- Difficulty fully moving your head side to side? ☐ Yes ☐ No
- Difficulty bending at your knees? ☐ Yes ☐ No
- Difficulty squatting to the ground? ☐ Yes ☐ No
- Difficulty climbing a flight of stairs or a ladder carrying more than 25 pounds? ☐ Yes ☐ No
- Any other muscle or skeletal problem that interferes with using a respirator? ☐ Yes ☐ No

Part B. Any of the following questions may be added at the discretion of the healthcare professional who will review the questionnaire.

In your present job, are you working at high altitudes, or in places where there is a lower than normal amount of oxygen? ☐ Yes ☐ No

If yes above, do you have feelings of dizziness, shortness of breath, pounding in your chest, or other symptoms while you're working under these conditions? ☐ Yes ☐ No

At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals, or have you come into skin contact with hazardous chemicals? ☐ Yes ☐ No

If "yes" above, please name the chemicals, if known: _____

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

- Asbestos? ☐ Yes ☐ No
- Silica? ☐ Yes ☐ No
- Tungsten/Cobalt? (grinding or welding) ☐ Yes ☐ No
- Beryllium? ☐ Yes ☐ No
- Aluminum? ☐ Yes ☐ No
- Coal (for example, mining)? ☐ Yes ☐ No
- Iron? ☐ Yes ☐ No
- Tin? ☐ Yes ☐ No
- Dusty environment? ☐ Yes ☐ No
- Any other hazard exposure? ☐ Yes ☐ No

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If "Yes", describe the exposure(s): _____

List any second jobs or side businesses you have:

List your previous occupations:

List your current and previous hobbies:

Have you served previously in any branch of the military? ☐ Yes ☐ No

If "Yes", were you exposed to biological or chemical agents, either during training or combat? ☐ Yes ☐ No

Have you ever worked on a HAZMAT team? ☐ Yes ☐ No

Other than for 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 known: _____

Will you be using any of the following items with your respirator?

HEPA (high efficiency particulate air) filter? ☐ Yes ☐ No

Canisters? ☐ Yes ☐ No

Cartridges? ☐ Yes ☐ No

How often are you expected to use the respirator(s)? "Yes" or "No" for all answers that apply to you.

Escape only (no rescue) ☐ Yes ☐ No

Emergency rescue only ☐ Yes ☐ No

Less than 5 hours per week ☐ Yes ☐ No

Less than 2 hours per day ☐ Yes ☐ No

2 to 4 hours per day ☐ Yes ☐ No

Over 4 hours per day ☐ Yes ☐ No

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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.).

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: _____

Will you be working at temperatures above 77 degrees Fahrenheit?

☐ Yes ☐ No

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):



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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, and security):

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APPENDIX H – MEDICAL FIT TEST EVALUATION PROCEDURE

AHERA-Accepted Fit Test Protocols

A. Fit Testing Procedures -- General Requirements

Fit Testing shall be conducted using the following procedures. The requirements in this appendix apply to all AHERA-accepted fit test methods.

1. The employee shall be allowed to pick the most acceptable respirator from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.
2. Prior to the selection process, the employee shall be shown how to put on a respirator, how it should be positioned on the face, how to set strap tension and how to determine an acceptable fit. A mirror shall be available to assist the employee in evaluating the fit and positioning of the respirator. This instruction may not constitute the employees formal training on respirator use, because it is only a review.
3. The employee shall be informed that he/she is being asked to select the respirator that provides the most acceptable fit. Each respirator represents a different size and shape, and if fitted and used properly, will provide adequate protection.
4. The employee shall be instructed to hold each chosen facepiece up to the face and eliminate those that obviously do not give an acceptable fit.
5. The more acceptable facepieces are noted in case the one selected proves unacceptable; the most comfortable mask is donned and worn at least five minutes to assess comfort. Assistance in assessing comfort can be given by discussing the points in the following item. 6. If the employee is not familiar with using a particular respirator, the employee shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps.
6. Assessment of comfort shall include a review of the following points with the employee and allowing the employee adequate time to determine the comfort of the respirator:
 - (a) Position of the mask on the nose
 - (b) Room for eye protection
 - (c) Room to talk
 - (d) Position of mask on face and cheeks

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7. The following criteria shall be used to help determine the adequacy of the respirator fit:
 - (a) Chin properly placed;
 - (b) Adequate strap tension, not overly tightened;
 - (c) Fit across nose bridge;
 - (d) Respirator of proper size to span distance from nose to chin;
 - (e) Tendency of respirator to slip;
 - (f) Self-observation in mirror to evaluate fit and respirator position.
8. The employee shall conduct a user seal check, either the negative or positive pressure seal checks recommended by the respirator manufacturer. Before conducting the negative and positive pressure checks, the employee shall be told to seat the mask on the face by moving the head from side-to-side and up and down slowly while taking in a few slow deep breaths. Another facepiece shall be selected and retested if the employee fails the user seal check tests.
9. The test shall not be conducted if there is any hair growth between the skin and the facepiece sealing surface, such as stubble beard growth, beard, mustache, or sideburns which cross the respirator sealing surface. Any type of apparel which interferes with a satisfactory fit shall be altered or removed.
10. If an employee exhibits difficulty in breathing during the tests, she or he shall be referred to a physician or other licensed health care professional, as appropriate, to determine whether the employee can wear a respirator while performing her or his duties.
11. If the employee finds the fit of the respirator unacceptable, the employee shall be given the opportunity to select a different respirator and to be retested.
12. Exercise regimen. Prior to the commencement of the fit test, the employee shall be given a description of the fit test and the employee responsibilities during the test. The respirator to be tested shall be worn for at least 5 minutes before the start of the fit test.
13. The fit test shall be performed while the employee is wearing any applicable safety equipment that may be worn during actual respirator use which could interfere with respirator fit.
14. Test Exercises.
 - (a) The following test exercises are to be performed for all fit testing methods prescribed in this Appendix, except for the Controlled Negative Pressure (CNP) method. A separate fit testing exercise regimen is contained in the CNP protocol. The employee shall perform exercises, in the test environment, in the following manner:
 - (1) Normal breathing. In a normal standing position, without talking, the subject shall breathe normally.

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- (2) Deep breathing. In a normal standing position, the subject shall breathe slowly and deeply, taking caution so as not to hyperventilate.
- (3) Turning head side to side. Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side.
- (4) Moving head up and down. Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling).
- (5) Talking. The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.

Rainbow Passage

When the sunlight strikes raindrops in the air, they act like a prism and form a rainbow. The rainbow is a division of white light into many beautiful colors. These take the shape of a long round arch, with its path high above, and its two ends apparently beyond the horizon. There is, according to legend, a boiling pot of gold at one end. People look, but no one ever finds it. When a man looks for something beyond reach, his friends say he is looking for the pot of gold at the end of the rainbow.

- (6) Grimace. The test subject shall grimace by smiling or frowning. (This applies only to Quantitative Fit Testing (QNFT) testing; it is not performed for Qualitative Fit Testing [QLFT]).
 - (7) Bending over. The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist.
 - (8) Normal breathing. Same as exercise (1).
- (b) Each test exercise shall be performed for one minute except for the grimace exercise which shall be performed for 15 seconds. The employee shall be questioned by the test conductor regarding the comfort of the respirator upon completion of the protocol. If it has become unacceptable, another model of respirator shall be tried. The respirator shall not be adjusted once the fit test exercises begin. Any adjustment voids the test, and the fit test must be repeated.

B. Qualitative Fit Test (QLFT) Protocols

1. General

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- (a) The District shall ensure that persons administering QLFT are able to prepare test solutions, calibrate equipment and perform tests properly, recognize invalid tests, and ensure that test equipment is in proper working order.
- (b) The District shall ensure that QLFT equipment is kept clean and well maintained so as to operate within the parameters for which it was designed.

2. Bitrex™ (Denatonium Benzoate) Solution Aerosol Qualitative Fit Test Protocol

The Bitrex™ (Denatonium benzoate) solution aerosol QLFT protocol uses the published saccharin test protocol because that protocol is widely accepted. Bitrex is routinely used as a taste aversion agent in household liquids which children should not be drinking and is endorsed by the American Medical Association, the National Safety Council, and the American Association of Poison Control Centers. The entire screening and testing procedure shall be explained to the test subject prior to the conduct of the screening test.

(a) Taste Threshold Screening.

The Bitrex taste threshold screening, performed without wearing a respirator, is intended to determine whether the individual being tested can detect the taste of Bitrex.

- (1) During threshold screening as well as during fit testing, employees shall wear an enclosure about the head and shoulders that is approximately 12 inches (30.5 cm) in diameter by 14 inches (35.6 cm) tall. The front portion of the enclosure shall be clear from the respirator and allow free movement of the head when a respirator is worn. An enclosure substantially similar to the 3M hood assembly, parts # FT 14 and # FT 15 combined, is adequate.
- (2) The test enclosure shall have a 3/4-inch (1.9 cm) hole in front of the test subject's nose and mouth area to accommodate the nebulizer nozzle.
- (3) The test subject shall don the test enclosure. Throughout the threshold screening test, the test subject shall breathe through his or her slightly open mouth with tongue extended. The subject is instructed to report when he/she detects a bitter taste
- (4) Using a DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent, the test conductor shall spray the Threshold Check Solution into the enclosure. This Nebulizer shall be clearly marked to distinguish it from the fit test solution nebulizer.
- (5) The Threshold Check Solution is prepared by adding 13.5 milligrams of Bitrex to 100 ml of 5% salt (NaCl) solution in distilled water.
- (6) To produce the aerosol, the nebulizer bulb is firmly squeezed so that the bulb collapses completely and is then released and allowed to fully expand.
- (7) An initial ten squeezes are repeated rapidly and then the employee is asked whether the Bitrex can be tasted. If the test subject reports tasting the bitter taste during the ten squeezes, the screening test is completed. The taste threshold is noted as ten regardless of the number of squeezes completed.

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- (8) If the first response is negative, ten more squeezes are repeated rapidly, and the employee is again asked whether the Bitrex is tasted. If the employee reports tasting the bitter taste during the second ten squeezes, the screening test is completed. The taste threshold is noted as twenty regardless of the number of squeezes completed.
 - (9) If the second response is negative, ten more squeezes are repeated rapidly, and the employee is again asked whether the Bitrex is tasted. If the employee reports tasting the bitter taste during the third set of ten squeezes, the screening test is completed. The taste threshold is noted as thirty regardless of the number of squeezes actually completed.
 - (10) The test conductor will take note of the number of squeezes required to solicit a taste response.
 - (11) If the Bitrex is not tasted after 30 squeezes (step 10), the employee is unable to taste Bitrex and may not perform the Bitrex fit test.
 - (12) If a taste response is elicited, the employee shall be asked to take note of the taste for reference in the fit test.
 - (13) Correct use of the nebulizer means that approximately 1 ml of liquid is used at a time in the nebulizer body.
 - (14) The nebulizer shall be thoroughly rinsed in water, shaken to dry, and refilled at least each morning and afternoon or at least every four hours.
- (b) Bitrex Solution Aerosol Fit Test Procedure.
- (1) The employee may not eat, drink (except plain water), smoke, or chew gum for 15 minutes before the test.
 - (2) The fit test uses the same enclosure as that described in 4(a) above.
 - (3) The employee shall don the enclosure while wearing the respirator selected according to Section A. of this appendix. The respirator shall be properly adjusted and equipped with any type of particulate filter(s).
 - (4) A second DeVilbiss Model 40 Inhalation Medication Nebulizer or equivalent is used to spray the fit test solution into the enclosure. This nebulizer shall be clearly marked to distinguish it from the screening test solution nebulizer.
 - (5) The fit test solution is prepared by adding 337.5 mg of Bitrex to 200 ml of a 5% salt (NaCl) solution in warm water.
 - (6) As before, the employee shall breathe through his or her slightly open mouth with tongue extended and be instructed to report if he/she tastes the bitter taste of Bitrex.
 - (7) The nebulizer is inserted into the hole in the front of the enclosure and an initial concentration of the fit test solution is sprayed into the enclosure using the same number of squeezes (either 10, 20 or 30 squeezes) based on the number of squeezes required to elicit a taste response as noted during the screening test.
 - (8) After generating the aerosol, the test subject shall be instructed to perform the exercises in Section A. 14. of this appendix.
 - (9) Every 30 seconds the aerosol concentration shall be replenished using one half the number of squeezes used initially (e.g., 5, 10 or 15).

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(10) The employee shall indicate to the test conductor if at any time during the fit test the taste of Bitrex is detected. If the test subject does not report tasting the Bitrex, the test is passed.

(11) If the taste of Bitrex is detected, the fit is deemed unsatisfactory, and the test has failed. A different respirator shall be tried, and the entire test procedure is repeated (taste threshold screening and fit testing).

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APPENDIX I – VOLUNTARY RESPIRATOR USE FORM

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. 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 read and understand this information regarding voluntary respirator use.

Printed Name

Date

Signature

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APPENDIX J – ANNUAL PROGRAM EVALUATION AND CERTIFICATION

The District is required to complete evaluations of the workplace to ensure the written Respiratory Protection Safety Standard is being properly implemented, and to consult employees to ensure they are using their respirator(s) properly.

Certification Questions:

- | | |
|---|--|
| 1) A qualified program administrator is in place and trained. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 2) The written Respiratory Protection Safety Standard is current. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 3) The workplace PPE and exposure assessment is current. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 4) All applicable employees are trained regarding respirator use and maintenance. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 5) Respirator inspections are completed at least once per month. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 6) Respirator fit testing of all applicable employees is current. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 7) Respirator medical evaluations remain current. | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| 8) Records are current and available for inspection | <input type="checkbox"/> Yes <input type="checkbox"/> No |

Safety Manager:

Signature

Date

Program Administrator:

Signature

Date