

# WRITTEN RESPIRATORY PROTECTION PROGRAM FOR

SANTA MONICA COMMUNITY COLLEGE DISTRICT

# TABLE OF CONTENTS

INTRODUC	FION	1
DISTRICT P	OLICY	2
1.1	DISTRICT POLICY	
1.2	PLAN REVIEW	2
WRITTEN R	ESPIRATORY PROTECTION PLAN	3
2.1	PROGRAM ADMINISTRATION	
2.2	DEFINITIONS	3
2.3	WHERE AND WHEN TO BE WORN	
2.4	MEDICAL APPROVAL	
2.5	FIT TESTING	
2.6	SELECTION AND USE OF RESPIRATORS	
2.7	RESPIRATOR INSPECTION AND MAINTENANCE	7
2.8	EMPLOYEE TRAINING	9
2.9	VOLUNTARY RESPIRATOR USE	
2.10	DOCUMENTATION AND RECORDKEEPING	9
	APPENDICES	
APPENDIX	A: USER SEAL CHECK PROCEDURES	11
APPENDIX	B: RESPIRATOR INSPECTION AND MAINTENANCE PROCEDURES	12
APPENDIX	C: MEDICAL EVALUATION QUESTIONNAIRE	13
APPENDIX	D: RESPIRATOR SELECTION	20
APPENDIX	E: INFORMATION FOR VOLUNTARY RESPIRATOR USE	21

#### INTRODUCTION

Many operations may contaminate the air with harmful airborne levels of dusts, fogs, fumes, mists, gases, smokes, sprays, vapors, or may involve oxygen-deficient atmospheres. These harmful air contaminants can enter the breathing zone and cause occupational injuries or illnesses to employees working in such atmospheres; therefore, it is essential that exposure to harmful air contaminants be controlled.

The primary objective is to prevent air contamination. The prevention of harmful air contaminants shall be accomplished by engineering controls whenever feasible. Examples of engineering controls may include:

- Enclosure or segregation of the operation
- General or dilution ventilation
- Local or removal ventilation
- Substitution with less toxic substances

Whenever engineering controls are not feasible or do not achieve full compliance to permissible exposure limits or threshold limit values, administrative controls, when practicable, should be implemented. Administrative controls may include such items as work practices and time allotted to hazardous exposures.

Respiratory protective equipment should be used to prevent or reduce exposure to harmful air contaminants only under the following conditions:

- when feasible engineering and administrative controls fail to reduce harmful exposures to employees to a safe level;
- during the time period necessary to install or implement feasible engineering controls;
- while maintenance is being performed on hazardous exhaust ventilation; or in emergencies.

The remaining sections of this document are the written Respiratory Protection Program being implemented by the District.

#### **DISTRICT POLICY**

#### RESPIRATORY PROTECTION PROGRAM

#### 1.1 DISTRICT POLICY

The Santa Monica Community College District (hereafter referred to as District) is committed to protecting the health, safety and welfare of its employees while they are performing District required jobs. The District will make all reasonable attempts to determine what operations may cause harmful contaminants to be released to the work atmosphere. When an assessment indicates potential air contamination above safe levels, the District will attempt to implement feasible engineering and/or administrative controls to reduce the exposure to a safe level. While the engineering and/or administrative controls are being implemented or if the controls are not adequate, the District will require implementation of a Respiratory Protection Program.

The Respiratory Protection Program will be based on the requirements of:

- 1. California Code of Regulations (CCR), Title 8, Section 5144;
- 2. 29 Code of Federal Regulations, Part 1910.134; and
- 3. American National Standard Institute (ANSI) Z88.2-1980

Section 2 of this document is the District's Written Respiratory Protection Plan, and as such will contain all pertinent information regarding the Respiratory Protection Program.

#### 1.2 PLAN REVIEW

To ensure that the written Respiratory Protection Plan remains a viable working document that reflects the current needs and status of the District, the Plan will be reviewed annually by the Program Administrator.

#### WRITTEN RESPIRATORY PROTECTION PLAN

The SMC Respiratory Protection Program administrators for the Santa Monica Community College District are the Superintendent/President and Vice Presidents. The Superintendent/President and Vice Presidents have the authority and responsibility for ensuring that District policies and practices are implemented, employees are provided a safe and healthful workplace and that operations are in compliance with this program and applicable with federal, state, and local regulations and standards.

#### 2.1 PROGRAM ADMINISTRATION

#### **COORDINATOR**

The Respiratory Protection Program will be administered by a trained Program Administrator and will be the responsibility of the District's Risk Management Department. The Program Administrator will be responsible for the management of this program and for ensuring that all aspects of this program are followed. The Program Administrator will be responsible for:

- Identifying those employees who may need respiratory protection
- Selecting and providing the proper type (s) of respiratory protection based on employee exposure
- Providing medical evaluations and fit-testing for respirator users
- Providing training to those employees required to use respirators

#### ADMINISTRATORS AND MANAGERS

- *Ensure Compliance*: Ensure that the Safety Respiratory Protection Program is being followed within their Departments and work groups.
- *Enforcement*: Enforce the use of all required personal protective equipment (PPE) necessary for the safe completion of an employee's job responsibilities.
- *Training*: Ensure that employees are appropriately trained.
- Responsible for ensuring that new employees receive their respirators within the first two weeks of the employee's start date.

#### **EMPLOYEES**

- *Compliance:* Employees who are issues respiratory protective personal protective equipment are required to wear the respirator while performing duties which require respiratory protection. Failure to wear the appropriate respirator may be grounds for disciplinary action.
- Employees shall comply with this policy.

#### 2.2 **DEFINITIONS**

Air-purifying respirator means a respirator with an air-purifying filter, cartridge, or canister that removes specific air contaminants by passing ambient air through the air-purifying element.

Air-supplying respirator means 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.

Emergency situation means 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 means 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) means 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.

Filter cartridge or air purifying element means a component used in respirators to remove solid or liquid aerosols from the inspired air.

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

Fit factor means 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 means 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.)

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

Immediately dangerous to life or health (IDLH) means 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.

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

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

Physician or other licensed health care professional (PLHCP) means an individual whose legally permitted scope or 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 this program.

Positive pressure respirator means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

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

Qualitative fit test (QLFT) means a pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

Quantitative fit test (QNFT) means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Respiratory inlet covering means that portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. It may be a facepiece, helmet, hood, suit, or a mouthpiece respirator with nose clamp.

Self-contained breathing apparatus (SCBA) means an air-supplying respirator for which the breathing air source is designed to be carried by the user.

Service life means 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 means an air-supplying respirator for which the source of breathing air is not designed to be carried by the user.

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

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

#### 2.3 WHEN AND WHERE TO BE WORN

When it is clearly impracticable to remove harmful air contaminants at their source by feasible engineering or administrative controls or by meeting the general requirements of mechanical ventilation systems, or when emergency protection against occasional and/or relatively brief exposure is needed, the District will provide approved respiratory protective equipment. Employees exposed to such hazards will be required to wear the District approved equipment.

#### 2.4 MEDICAL APPROVAL

Any District employee required to wear respiratory protective equipment shall not wear such equipment until medically approved. The District will arrange, for each employee required to wear a respirator, sufficient time to complete a medical questionnaire (Appendix C). The medical questionnaire will be reviewed by a physician or licensed health care professional (PLHCP). The PLHCP will determine if the employee is medically cleared for respirator usage or request a follow-up medical examination. A follow-up medical examination will be provided to any employee who gives a positive response to any question in Section 2, Part A, questions 1 – 8 of the medical questionnaire, or any employee so determined by the PLHCP. The follow-up medical examination will include any medical tests, consultations, or diagnostic procedures the PLHCP deems necessary to make a final determination. The PLHCP will provide the District with a written recommendation regarding the employee's ability to use a respirator. The District will provide employees the opportunity to discuss the questionnaire and medical examination results with the PLHCP.

The District will provide to the PLHCP the following information before the PLHCP makes a

determination concerning the employee's ability to use a respirator:

- The type and weight of the respirator to be used
- The duration and frequency of respirator use
- The expected physical work effort
- Additional protective clothing to be worn (if any)
- Temperature and humidity extremes that may be encountered
- A copy of the District's Respiratory Protection Plan and a copy of CCR, Title 8 Section 5144

#### 2.5 FIT TESTING

Before any District employee is required to use a respirator (negative or positive-pressure facepiece), the employee must be fit tested with the same make, model, style, and size of the respirator to be used. After the initial fit test, subsequent fit testing will be conducted annually for those employees required to use respirators.

Fit tests will be administered using OSHA-accepted qualitative fit test (QLFT) or quantitative fit test (QNFT) protocol. Fit testing of air supplying respirators (SCBA) will be performed in the negative pressure mode regardless of the mode of operation.

Qualitative fit testing will be performed with Isoamyl Acetate, irritant smoke, or an aerosol saccharin solution. Quantitative fit testing, when used, will be performed with a Porta-Count or similar instrument.

#### 2.6 SELECTION AND USE OF RESPIRATORS

The District will select and provide the appropriate respirator based on the respiratory hazards to which the employee will be exposed. A list of District approved respirators (including appropriate filter cartridges) is located in Appendix D. The District can make estimates of respiratory hazards based on contaminants and usage or from monitoring results. Respirator selection must ensure that employee exposure will not exceed published Permissible Exposure Limits (PEL), Threshold Limit Values (TLV), or Short-Term Exposure Limits (STEL). All respiratory equipment must be NIOSH approved and used in compliance with manufacturer's instructions.

District employees (except Public Safety personnel, see 2.6.3) will be limited to the use of negative pressure, air-purifying (filter cartridge) respirators while performing District work. This is based on the foreseeable exposures normally encountered by non-Public Safety District employees. The only exception for non-Public Safety employees would be an employee deemed unable to use a negative pressure respirator by the PLHCP. In this case a powered air-purifying respirator (PAR) may be required. These instances will be handled on a case-by-case basis by the Program Administrator.

Filter cartridges must be equipped with an end-of-service-life indicator (ESLI). An ESLI is a system to warn the user of the approach of the end of the useful life of the cartridge. This may be a manufacturer's warning regarding the taste or smell of a contaminant while using the respirator or a system by which filter cartridges are changed out on a periodic basis based on manufacturer's recommendations. When filter cartridges are to be changed out on a periodic basis, they must be labeled with the date of first use. Filter cartridges must be labeled and color-coded with the NIOSH approval label.

#### 2.6.1 FIT CHECKS

Employees will be required to perform fit checks before fit testing and each time the respirator is put on before entering a hazardous area. Two fit checks will be performed as part of the fit check procedure. These are:

**Positive pressure fit check** - performed by placing the heel of the hand over the exhalation valve cover, pressing lightly and exhaling gently. The face piece should bulge slightly with no air leaks detected between the face and face piece; and

**Negative pressure fit check** - performed by placing the palms of both hands over the filter holes or inhalation valves and gently inhaling for 5 to 10 seconds. The face piece should collapse slightly with no air leaks detected between the face and face piece.

If air leakage is detected for either of the two checks, then 1) the respirator should be repositioned on the face; 2) the straps tension should be readjusted; or 3) the respirator should be changed.

#### 2.6.2 LIMITATIONS

Facial hair which interferes with the sealing surface of a respirator renders the respirator ineffective against protecting from harmful air contaminants. Therefore, the District will not permit any employee to be trained, fit tested or wear a respirator in a restricted area if that employee has facial or any other hair which contacts or interferes with the respirator sealing surface. Any such interfering hair must be moved or removed to avoid compromising the respirator seal.

The use of air-purifying, filter cartridge respirators is strictly prohibited in oxygen deficient atmospheres. Only supplied-air SCBA respirators may be used in these atmospheres.

#### 2.6.3 ATMOSPHERES IMMEDIATELY DANGEROUS TO LIFE OR HEALTH (IDLH)

Atmospheres immediately dangerous to life or health (IDLH) are those atmospheres that pose an immediate threat to life, would cause irreversible health effects, or impair an individual's ability to escape. The only District employees that may foreseeably be exposed to an IDLH atmosphere would be Public Safety personnel. In instances where IDLH atmospheres are encountered the following shall apply:

- The only approved respirator will be a full-face pressure demand SCBA
- A minimum of two persons, equipped with SCBA's must be on the job.
- A minimum of one person, equipped with SCBA must be available as a standby.
- Communication (visual, voice, signal line) must be maintained between all individuals present.
- The standby person must be trained and equipped to provide effective emergency rescue.

#### 2.7 RESPIRATOR INSPECTION AND MAINTENANCE

The District will require a maintenance program for all respiratory protective equipment issued to and used by District personnel. The Program Administrator will ensure that the maintenance program has been implemented and is being followed. Damage or defects discovered during any portion of the

maintenance program shall be brought to the attention of Program Administrator, who will ensure that appropriate corrective action is taken.

#### 2.7.1 RESPIRATOR INSPECTION

All respiratory equipment will be inspected under the following schedule:

- Before and after each use by the wearer
- After cleaning and disinfection
- After each use, but at least monthly for respirators not routinely used which are kept ready for emergency use

Any damage noted by the inspection should be reported to Program Administrator immediately. Respirators found damaged or defective will be immediately removed from service and will not be returned to service until properly repaired.

#### 2.7.2 RESPIRATOR CLEANING AND MAINTENANCE

The District will provide appropriate cleansing and sanitizing materials. The respirator user will be responsible for cleaning and sanitizing respirators as frequently as necessary to ensure sanitary protection is provided the wearer. Respiratory protective equipment that may be used by more than one individual will never be passed from one person to another until it has been cleaned and sanitized.

Respirator cleaning is to be done in accordance with the manufacturer's recommendations. However, as a minimum guideline, each respirator should be cleaned in a mild soap solution, double rinsed and air dried prior to storage. The Program Administrator will ensure that all cleaning and maintenance guidelines are followed.

Complete respirator inspection and maintenance procedures are described in Appendix B.

#### 2.7.3 RESPIRATOR STORAGE

After cleaning, inspection, and air drying, the respirator shall be stored to protect against dust, sunlight, extreme temperatures, excessive moisture, or damaging chemicals. Respirators placed at work stations for emergency use will only be stored in clearly marked compartments or containers designed for that purpose and will be located where they are quickly accessible. Routinely used respirators may be placed in plastic bags and stored in cabinets, lockers or tool boxes, provided that the face piece and exhalation valve rest in a normal position and their functioning will not be impaired by the elastic setting in an abnormal position. Cartridge filters may also be stored in plastic bags, but separately from the clean respirator.

#### 2.7.4 WEAR AND DETERIORATION

The District requires each employee required to wear respiratory protective equipment to notify the Program Administrator of any damage, defects, wear or deterioration found in their equipment. The District will repair or replace respiratory protective equipment as required due to wear or deterioration.

#### 2.8 EMPLOYEE TRAINING

To ensure proper respirator selection, use, maintenance and storage, the District will provide all employees required to wear respiratory protection with education and training. The education and training will cover:

- Medical evaluations
- Selection, use and limitations of respirators
- Proper inspection and donning of the respirator
- Fit checks: how to do and frequency
- Fit testing
- Procedures to follow if an atmosphere immediately hazardous to life or health is encountered
- How to care for, maintain, and store the respirator

#### 2.8.1 REFRESHER TRAINING

Refresher training for employees required to use respiratory protection will be conducted annually. Refresher training will include the elements described in Section 2.10.

#### 2.9 VOLUNTARY RESPIRATOR USE

There may be occasions where employees opt to wear respirators although respirator use would not be required under this program. This type of usage is termed "voluntary use". In these cases, the District may supply the respirator or the employee may furnish their own. If an employee chooses to voluntarily use a respirator the District must ensure the following:

- The voluntary usage will not itself create a hazard
- That the employee opting for voluntary use be medically approved to use the respirator (Section 2.4)
- The respirator is cleaned, stored, and maintained properly, and
- The information contained in Appendix E is provided to the employee.

Exception: voluntary use respirator requirements do not include filtering facepieces such as dust masks.

#### 2.10 DOCUMENTATION AND RECORDKEEPING

The Program Administrator will ensure that the following records are kept as part of the District Respiratory Protective Equipment Program:

- Employee education and training documentation
- Fit testing results
- Medical approvals
- Workplace air monitoring results
- Inspections of respirators designated for emergency use, with a record of the most recent inspection maintained on the respirator or its storage container.

The original records will be kept in the Risk Management Department and a copy of the records will be

kept in the Facilities/Maintenance Department.

## APPENDIX A

# **USER SEAL CHECK PROCEDURES**

## **User Seal Check Procedures (Mandatory)**

The individual who uses a tight-fitting respirator is to perform a user seal check to ensure that an adequate seal is achieved each time the respirator is put on. The positive and negative pressure checks listed in this appendix shall be used. User seal checks are not substitutes for qualitative or quantitative fit tests.

Facepiece Positive and/or Negative Pressure Checks.

- A. Positive pressure check. Close off the exhalation valve and exhale gently into the facepiece. The face fit is considered satisfactory if a slight positive pressure can be built up inside the facepiece 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.
- B. 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 facepiece collapses slightly, and hold the breath for ten 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 facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

## APPENDIX B

## RESPIRATOR CLEANING PROCEDURES

# **Respirator Cleaning Procedures (Mandatory)**

These procedures are provided for employer use when cleaning respirators. They are general in nature, and the employer as an alternative may use the cleaning recommendations provided by the manufacturer of the respirators used by their employees, provided such procedures are as effective as those listed here. Equivalent effectiveness simply means that the procedures used must ensure that the respirator is properly cleaned and disinfected in a manner that prevents damage to the respirator and does not cause harm to the user.

- I. Procedures for Cleaning Respirators.
- A. Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.
- B. Wash components in warm (43 deg. C [110 deg. F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.
- C. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain.
- D. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following:
  - 1. Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water at 43 deg. C (110 deg. F); or,
  - 2. Aqueous solution of iodine (50 ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide/100 cc of 45% alcohol) to one liter of water at 43 deg. C (110 deg. F); or,
  - 3. Other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
- E. Rinse components thoroughly in clean, warm (43 deg. C [110 deg. F] maximum), preferably running water. Drain. The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.
- F. Components should be hand-dried with a clean lint-free cloth or air-dried.
- G. Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.
- H. Test the respirator to ensure that all components work properly.

# APPENDIX C

# MEDICAL EVALUATION QUESTIONNAIRE

# **Respirator Medical Evaluation Questionnaire (Mandatory)**

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

1. Today's date:		
2. Your name:		
3. Your age (to nearest ye	ear):	
4. Sex (circle one): Male/I	<sup>7</sup> emale	
5. Your height:	ft.	in.
6. Your weight:	lbs.	
7. Your job title:		
8. A phone number where yo questionnaire (include the Ar		by the health care professional who reviews this
9. The best time to phone you	at this number:	
10. Has your employer told y questionnaire (circle one): You		the health care professional who will review this
11. Check the type of respira	tor you will use (y	ou can check more than one category):
a N, R, or P disp	oosable respirator	(filter-mask, non-cartridge type only).
b Other type (fo self-contained breath		r full-facepiece type, powered-air purifying, supplied-air,
12. Have you worn a respirat	or (circle one): Ye	es/No
If "yes," what type(s	):	
Part A. Section 2. (Mandator been selected to use any type		ough 9 below must be answered by every employee who hase circle "yes" or "no").
1. Do you currently smoke to	bacco, or have you	u smoked tobacco in the last month: Yes/No
2. Have you ever had any of	the following cond	ditions?
a. Seizures (fits): Yes	s/No	
b. Diabetes (sugar di	sease): Yes/No	

- c. Allergic reactions that interfere with your breathing: Yes/No
- d. Claustrophobia (fear of closed-in places): Yes/No
- e. Trouble smelling odors: Yes/No
- 3. Have you ever had any of the following pulmonary or lung problems?
  - a. Asbestosis: Yes/No
  - b. Asthma: Yes/No
  - c. Chronic bronchitis: Yes/No
  - d. Emphysema: Yes/No
  - e. Pneumonia: Yes/No
  - f. Tuberculosis: Yes/No
  - g. Silicosis: Yes/No
  - h. Pneumothorax (collapsed lung): Yes/No
  - i. Lung cancer: Yes/No
  - j. Broken ribs: Yes/No
  - k. Any chest injuries or surgeries: Yes/No
  - 1. Any other lung problem that you've been told about: Yes/No
- 4. Do you currently have any of the following symptoms of pulmonary or lung illness?
  - a. Shortness of breath: Yes/No
- b. Shortness of breath when walking fast on level ground or walking up a slight hill or incline: Yes/No
- 1 03/110
  - c. Shortness of breath when walking with other people at an ordinary pace on level ground: Yes/No
  - d. Have to stop for breath when walking at your own pace on level ground: Yes/No
  - e. Shortness of breath when washing or dressing yourself: Yes/No
  - f. Shortness of breath that interferes with your job: Yes/No
  - g. Coughing that produces phlegm (thick sputum): Yes/No
  - h. Coughing that wakes you early in the morning: Yes/No
  - i. Coughing that occurs mostly when you are lying down: Yes/No
  - j. Coughing up blood in the last month: Yes/No
  - k. Wheezing: Yes/No

- 1. Wheezing that interferes with your job: Yes/No
- m. Chest pain when you breathe deeply: Yes/No
- n. Any other symptoms that you think may be related to lung problems: Yes/No
- 5. Have you ever had any of the following cardiovascular or heart problems?
  - a. Heart attack: Yes/No
  - b. Stroke: Yes/No
  - c. Angina: Yes/No
  - d. Heart failure: Yes/No
  - e. Swelling in your legs or feet (not caused by walking): Yes/No
  - f. Heart arrhythmia (heart beating irregularly): Yes/No
  - g. High blood pressure: Yes/No
  - h. Any other heart problem that you've been told about: Yes/No
- 6. Have you ever had any of the following cardiovascular or heart symptoms?
  - a. Frequent pain or tightness in your chest: Yes/No
  - b. Pain or tightness in your chest during physical activity: Yes/No
  - c. Pain or tightness in your chest that interferes with your job: Yes/No
  - d. In the past two years, have you noticed your heart skipping or missing a beat: Yes/No
  - e. Heartburn or indigestion that is not related to eating: Yes/No
  - f. Any other symptoms that you think may be related to heart or circulation problems: Yes/No
- 7. Do you currently take medication for any of the following problems?
  - a. Breathing or lung problems: Yes/No
  - b. Heart trouble: Yes/No
  - c. Blood pressure: Yes/No
  - d. Seizures (fits): Yes/No
- 8. If you've ever used a respirator, have you ever had any of the following problems?

(If you've never used a respirator, check the following space and go to question 9:)

- a. Eye irritation: Yes/No
- b. Skin allergies or rashes: Yes/No
- c. Anxiety: Yes/No

- d. General weakness or fatigue: Yes/No
- e. Any other problem that interferes with your use of a respirator: Yes/No
- 9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes/No

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

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

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

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

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

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

If "yes," name the chemicals if you know then	n:,

- 3. Have you ever worked with any of the materials, or under any of the conditions, listed below:
  - a. Asbestos: Yes/No
  - b. Silica (e.g., in sandblasting): Yes/No
  - c. Tungsten/cobalt (e.g., grinding or welding this material): Yes/No
  - d. Beryllium: Yes/No
  - e. Aluminum: Yes/No
  - f. Coal (for example, mining): Yes/No
  - g. Iron: Yes/No
  - h. Tin: Yes/No
  - i. Dusty environments: Yes/No
  - j. Any other hazardous exposures: Yes/No

If "yes," describe these exposures:

- 4. List any second jobs or side businesses you have:
- 5. List your previous occupations:
- 6. List your current and previous hobbies:
- 7. Have you been in the military services? Yes/No

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

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

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

a. HEPA Filters: Yes/No			
b. Canisters (for example, gas masks): Yes/No			
c. Cartridges: Yes/No			
11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?:			
a. Escape only (no rescue): Yes/No			
b. Emergency rescue only: Yes/No			
c. Less than 5 hours per week: Yes/No			
d. Less than 2 hours per day: Yes/No			
e. 2 to 4 hours per day: Yes/No			
f. Over 4 hours per day: Yes/No			
12. During the period you are using the respirator(s), is your work effort: a. Light (less than 200 kcal per hour): Yes/No			
If "yes," how long does this period last during the average shift: hrs mins.			
Examples of a light work effort are sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines.			
b. Moderate (200 to 350 kcal per hour): Yes/No			
If "yes," how long does this period last during the average shift: hrs mins.			
Examples of moderate work effort are sitting while nailing or filing; driving a truck or bus in urban traffic standing while drilling, nailing, performing assembly work, or transferring a moderate load (about 35 lbs at trunk level; walking on a level surface about 2 mph or down a 5-degree grade about 3 mph; or pushing wheelbarrow with a heavy load (about 100 lbs.) on a level surface.			
c. Heavy (above 350 kcal per hour): Yes/No			
If "yes," how long does this period last during the average shift: hrs mins.			
Examples of heavy work are lifting a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; shoveling; standing while bricklaying or chipping castings; walking up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).			
13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using the respirator: Yes/No			
If "yes," describe this protective clothing and/or equipment:			
14. Will you be working under hot conditions (temperature exceeding 77 deg. F): Yes/No			
15. Will you be working under humid conditions: Yes/No			

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

- 16. Describe the work you'll be doing while you're using your respirator(s):
- 17. Describe any special or hazardous conditions you might encounter when you're using your respirator(s) (for example, confined spaces, life-threatening gases):
- 18. Provide the following information, if you know it, for each toxic substance that you'll be exposed to when you're using your respirator(s):

Name of first toxic substance:

Estimated maximum exposure level per shift:

Duration of exposure per shift:

Name of second toxic substance:

Estimated maximum exposure level per shift:

Duration of exposure per shift:

Name of third toxic substance:

Estimated maximum exposure level per shift:

Duration of exposure per shift:

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

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

# APPENDIX D

## RESPIRATOR SELECTION

**Selection of Respirators.** 

# District Approved Respirators & Filters for Qualified Employees

Brand Name	Mask Style	Filter Cartridge Type	Misc. Info.

# **APPENDIX E**

# INFORMATION FOR VOLUNTARY RESPIRATOR USE

**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 respirators 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 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 designated 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.