

CITY OF APPLETON PERSONNEL POLICY	TITLE: Respirator Protection (29CFR 1910.134)	
ISSUE DATE: 1994	LAST UPDATE: April 2002 June 2006 February 2010 (form only) August 2012 <u>2018</u>	SECTION: Safety
POLICY SOURCE: Human Resources Department	AUDIENCE: Employees who wear a respirator	TOTAL PAGES: 18
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I. PURPOSE:

To coordinate the use and maintenance of respiratory protection equipment which is used to reduce employee exposure to air contaminants.

II. POLICY:

City Policy & 29 CFR 1910.134 requires that employees who use a respirator be properly trained, fit tested and have proper medical clearance to reduce their exposure to contaminants.

III. DISCUSSION:

The guidelines in this policy are designed to help reduce employee exposure to occupational air contaminants and oxygen deficiency. The primary objective is to prevent excessive exposure to these contaminants.

IV. DEFINITIONS:

- A. Donned: Put on and secure.
- B. DWD: Department of Workplace Development.
- C. ESLI: End of Service life indicator.
- D. IDLH: Immediately dangerous to life or health.
- E. NIOSH: National Institute of Occupational Safety and Health that deals with research.
- F. OSHA: Occupational Safety & Health Administration
- G. QLFT: Qualitative fit test.
- H. QNFT: Quantitative fit test.
- I. P/APR: Powered/ air-purifying respirator.
- J. APR/ - Air-purifying respirator.
- K. PLHCP: Physician or other licensed health care professional

- L. SAR: Supplied Air Respirator.
- M. SCBA: Self-Contained breathing apparatus.
- N. **APF: Applied Protection Factor**

V. PROCEDURES:

- A. RESPONSIBILITIES: The overall administration of the Respiratory Protection Program will be the responsibility of the Human Resources Generalist/Safety Coordinator. Each City department/division that uses respirators will appoint an individual to administer and monitor their program. The following departments/divisions will enforce a respirator program.

Department	<u>Example Job Tasks</u>	Program Administered by
Police	Gas mask, tear gas exposure T.B. exposure-first responder Investigators	Lieutenant -Support Services Coordinator
<u>Utilities Department</u> Wastewater	Chlorine Chemical handling, confined space, other tasks <u>See current PPE roster</u>	WW Operations Supervisor
Parks, Recreation and Facilities Management	Confined space, painting, welding, chlorine handling, painting, pesticides, asbestos concrete saw/drill/chip/grind	Facilities Manager/Grounds Manager
DPW - Municipal Garage	Confined space, painting, welding, concrete saw/drill/chip/grind	<u>Operations Supervisor</u> /Safety Coordinator
Fire	Fire fighting, hazardous materials, rescue operations TB - enter homes placed on respiratory precautions	Battalion Chief/ Training <u>Resource</u> <u>Development & Special</u> <u>Operations</u>
<u>Utilities Department</u> Water Filtration	Chlorine Chemical handling, confined space, bulk chemical handling <u>see current</u> <u>Plant PPE roster</u>	Water Operations Supervisor
Valley Transit	Painting, welding	Maintenance Supervisor
Health	T.B. exposure, pathogens, organisms	R.N. Supervisor <u>Public Health</u> <u>Supervisor</u>
Water Distribution	Asbestos	Meter Service personnel

Responsibilities at each department/division include:

1. Identifying and locating hazardous exposures.
2. Respirator selection.
3. Medical evaluation of respirator users (Human Resources Generalist/ Safety Coordinator will coordinate).
4. Employee training and qualitative respirator fit testing (Qualified fire and/or specific designee personnel, or qualified product providers will assist).
5. Cleaning, maintenance and storage of respirators.
6. Evaluation of overall respirator program.
7. Where respirator use is required.

B. IDENTIFICATION AND LOCATION OF AIR CONTAMINANT EXPOSURES

1. Based on a comprehensive industrial hygiene evaluation conducted by the various city departments, as currently identified, potential hazardous air contaminant exposures are summarized in Exhibit I. Additional air contaminant monitoring will be conducted during confined space entry whenever exposures are possible.
2. Each department that enters a confined space will conduct this monitoring. Subsequent information will be added as it is accumulated (the Fire Department will administer their respirator program and will maintain their training records).
3. Respirator Selection: All respirators shall be selected based on the criteria established by current OSHA regulations. Only respirators having NIOSH approval shall be used. Exhibit I also lists respirators currently being used by specific departments/divisions.

C. MEDICAL FORM AND EXAM

1. Employees who are required to use a respirator will complete a medical questionnaire yearly (Exhibit II).
2. SCBA users will complete a medical questionnaire yearly (Exhibit II). An exam by the City's health care provider will be scheduled based on prior history (ranging in frequency from yearly to every 5 years). Based on the finding of the medical exam and pulmonary function test the physician may also order an EKG or chest x-rays.
3. Non SCBA users may be required to undergo a medical exam and pulmonary function test based on a review of the completed medical form. (A medical professional will determine this). A physician may also require an EKG and chest x-rays.

D. TRAINING AND INFORMATION

1. Each department/division that requires the use of a respirator shall ensure that each employee can demonstrate knowledge of the following (see Exhibit III):
 - a. Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
 - b. What the limitations and capabilities of the respirator are.
 - c. How to use the respirator effectively in emergency situations, including situations when the respirator malfunctions.
 - d. How to inspect, put on and remove, use and check the seals of the

respirator.

- e. Procedures for the maintenance and storage of the respirator.
2. On an annual basis, training shall be conducted in a manner that is understandable to the employee. Each department will provide their own training. This shall be done prior to requiring the employee to use a respirator in the workplace.
3. Procedures for IDLH atmospheres: Employees who wear an SCBA are to refer to the Confined Space Policy for specific rules relating to entry.
4. Procedures for interior structural fire fighting (this applies only to Firefighters):
 - a. In an interior structural fire, the city shall ensure that:
 - At least two employees enter the IDLH atmosphere and remain in visual or voice contact with one another at all times.
 - At least two employees are located outside the IDLH atmosphere.
 - All employees engaged in interior structural firefighting use SCBAs.

E. FIT TESTING

1. Each major department/division that utilizes respirators shall conduct annual fit testing, for each type of respirator the employee is required to wear, using the following procedures and complete the "Respirator Fit Test form" (see Exhibit IV).
2. Requirements:
 - a. The employee shall be allowed to pick the most acceptable respirator from a sufficient number of respirator models and sizes.
 - b. 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.
 - c. The employee shall be informed that he/she is being asked to select the respirator that provides the most acceptable fit.
 - d. Each employee shall be instructed to hold each chosen face piece up to the face to eliminate a poor fit.
 - e. After a respirator is selected, it should be donned and worn at least five minutes to assess comfort.
 - f. Assessment of comfort shall include:
 - Position of mask on nose
 - Room for eye protection
 - Room to talk
 - Position of mask on face and cheeks
 - Tendency of respirator to slip
 - Self observation in mirror to evaluate fit and respirator position
 - g. The test shall not be conducted if there is any hair growth between the skin and the face piece sealing surface such as stubble, beard growth, beard, mustache or sideburns which cross the respirator sealing surface.
 - h. User seal check: A user seal check is required every time the wearer puts on a respirator. The purpose is to confirm the respirator is properly donned and properly sealed to the face.

F. RESPIRATOR CLEANING, MAINTENANCE AND STORAGE:

1. Cleaning and maintenance of respirators will be the responsibility of each major department/division utilizing respirators. The individual appointed to monitor the program shall on a monthly basis inspect and document that the inspection was done (see Exhibit V for sample form to use). The information will include:
 - a. Respirator type
 - b. Manufacturer
 - c. Date in service
 - d. Monthly inspection date
2. Procedures for cleaning, maintenance, storage and inspection are the following:
 - a. Respirators must be washed and disinfected after each day of use.
 - b. Remove paint accumulation.
 - c. Store in a plastic film bag and carton or approved mask bag.
 - d. Inspect the respirator with each use.
 - e. Replace parts from the same manufacturer.

G. RESPIRATOR PROGRAM EVALUATION:

1. Each department on an annual basis will conduct the overall evaluation of the respirator program (see Exhibit VI). This evaluation will include inspection of records, observation of user proficiency, and random inspection of respirators for cleanliness, deterioration, proper selection and storage.
2. A record of the evaluation will be recorded, and these records will remain within the department and be readily accessible in the event of an on-site inspection.

RESPIRATOR SELECTION SUMMARY

Location	Operation	Air Contaminants	Respirator	NIOSH Approval Number
Wastewater (see confined space entry policy)	Confined Space Entry	Lack of Oxygen Combustible Gas Hydrogen Sulfide/ Carbon Monoxide	SCBA	TC-13F-30
Wastewater Chlorine Storage Room "L" Building	Changing ton cylinders of Chlorine	Chlorine Gas	SCBA	TC-13F-30
Wastewater Sulfur Dioxide Storage Room "C" Building	Changing ton cylinders of Sulfur Dioxide	Sulfur dioxide Gas	SCBA	TC-13F-30
Wastewater Caustic Room "D" Building	Potassium Hydroxide handling	Potassium Hydroxide	Dust Mask	TC-21C-132
Wastewater "B" Building Lime area of Grit & Screen "B" Building	Calcium Hydroxide (Lime) handling	Calcium Hydroxide	3M N100 Particulate Respirator Dust Mask	TC-21C-132 TC-84A-1298
Wastewater "B" Building Sampler Room	<u>Sulfuric Acid</u> <u>Hydrochloric Acid</u> <u>Sampler Cleaning</u>	<u>Sulfuric Acid</u> <u>Hydrochloric Acid</u>	<u>Chemical Cartridge</u> <u>MSA UltraTwin APR</u> <u>with COMFO GMC</u> <u>Cartridge</u>	<u>TC-23C-47</u> <u>TC-23C-0146</u>
Wastewater "J" Building	<u>Sulfuric Acid</u> <u>Hydrochloric Acid</u> <u>Sampler Cleaning</u>	<u>Sulfuric Acid</u> <u>Hydrochloric Acid</u>	<u>Chemical Cartridge</u> <u>MSA UltraTwin APR</u> <u>with COMFO GMC</u> <u>Cartridge</u>	<u>TC-23C-47</u> <u>TC-23C-0146</u>
Wastewater "K" Building Gas Compressor Room	Potassium Hydroxide (Caustic) handling	Potassium Hydroxide	Dust Mask <u>MSA UltraTwin APR</u> <u>with COMFO GMC</u> <u>Cartridge</u>	TC-21C-132 <u>TC-23C-0146</u>
Wastewater "V" Building BFP Room	<u>Sulfuric Acid</u> <u>Hydrochloric Acid</u> <u>Belt Wash</u>	<u>Sulfuric Acid</u> <u>Hydrochloric Acid</u>	<u>Chemical Cartridge</u> <u>MSA UltraTwin APR</u> <u>with COMFO GMC</u> <u>Cartridge</u>	<u>TC-23C-47</u> <u>TC-23C-0146</u>
Wastewater "V2" Building BFP Room "V" Building	<u>Biosolids Storage</u> <u>Cleaning</u> <u>Sulfuric Acid</u> <u>Belt Wash</u>	<u>Dusts</u> <u>Sulfuric Acid</u>	<u>3M N100 Particulate Respirator</u> <u>Chemical Cartridge</u>	<u>TC-84A-1298</u> TC-23C-47
Police	SWAT	Tear Gas	Single cartridge tactical gas mask	TC-14G-159
	First Responder Investigators	TB Organic vapors	HEPA 6000 Filter/cartridge	N100 3m 60921
Valley Transit	Painting	Organic vapors	Supplied Air Respirator	1120 GR

Location	Operation	Air Contaminants	Respirator	NIOSH Approval Number
Park & Rec (see confined-space policy)	Confined Space Entry Spraying pesticides Welding Concrete sawing, drill, grind, chipping	Lack of oxygen Combustible gas Hydrogen Sulfide/ Carbon Monoxide Organic vapors Gases Silica Dust	SCBA - ???? APF 10 respirator 6000 series cartridge 9920 Dust/Fumes	TC-13F-30 TC-23C-1062 N 100 95
Fire	Putting out fires Confined space First Responder Inspectors HazMat	Unknown Unknown T.B.Pathogens/ Organisms Dusts	SCBA SABA HEPA Cartridge PAPR APR	TC-13F-130 N100
Municipal Garage	Confined Space Entry Welding, Painting Concrete sawing, drill, grind, chipping	Lack of oxygen Combustible gas Hydrogen Sulfide Carbon Monoxide Silica Dust Organic Vapors	SAR APF 10 respirator	MSA 7-212-6 N100 N95,N100, 6000 Series/P100
Water Distribution	Removing asbestos	Asbestos		
Health Dept.	Communicable Disease	Biological organisms	HEPA	N100

Location	Operation	Air Contaminants	Respirator	NIOSH Approval Number
All Locations	Painting	Paint Fumes	Cartridge Respirator	TC-23C-435
Water Plant CO ₂ alarm - Softener Gallery #005	CO ₂ Leak	Lack of Oxygen & CO ₂	SCBA	TC-13F-30
Water Plant Access Gallery #002 & Contactor Gallery #003	Acidizing PH Probes and Turbidity Meters	Acid	Cartridge Respirator	Yellow TC-23C-0146 Olive TC-84A-6702/TC-84A-0359 / Magenta
Water Treatment Facility (see confined space policy)	Confined Space entry (Level 2)	Lack of Oxygen Combustible Gas hydrogen Sulfide Carbon Monoxide	SCBA	TC-13F-30
Water Plant Lime Rooms #156 & 159	Checking Equipment	Lime Dust	Dust Mask	N 100 TC-84A-1298
			Cartridge Respirator	P-100 / TC-84A-0359 Magenta
Water Plant Lime Feed Room #156, 159 & 153 Softening Room	Cleaning Equipment	Acid	Cartridge Respirator	TC-23C-0146 Yellow
		Lime Dust / Acid		TC-84A-6702 Olive / TC-84A-0359 Magenta
Water Towers - Water Plant	Disinfecting Water Towers	Calcium Hypochlorite	Cartridge Respirator	TC-23C-47 / TC-23C-0146 Yellow

Water Plant North Tower - Chlorine Feed	Disinfecting Water	Calcium Hypochlorite	Cartridge Respirator	TC-23C-47 / TC-23C-0146 <u>Yellow</u>
Water Plant Carbon Room #158	Unloading Carbon	Carbon Dust	Dust Mask	TC-84A-1298N-100
	Cleaning Equipment	Carbon Dust	Cartridge Respirator	TC-84A-1298P-100 / TC-84A-0359 <u>Magenta</u>
Water Plant Tank Room - Fluoride Room #142	Precaution in Case of Spill	Fluorocisicic Acid	SCBA	TC-13F-30
Water Plant Tank Room #142	Cleaning Equipment	Sodium Hydroxide	Cartridge Respirator	TC-84A-6702 <u>Olive / TC-84A-0359</u> <u>Magenta</u>
Water Plant Chemical Sump Pit Room #142	Cleaning of Sump Pit	Ammonia, Fluoride, Sodium Hydroxide, Sodium Hypochlorite	Cartridge Respirator	TC-84A-6702 <u>Olive / TC-84A-0359</u> <u>Magenta</u>
			SCBA	TC-13F-30
Water Plant Chemical Room #155 - Polymer Feed	Cleaning Tank - Mist Present	Ciba-LT25 <u>AS1919</u>	Dust Mask	TC-84A-1298N-100
Water Plant Membrane Room # 151	Clean in Place, Chemical Enhanced Backflush	Hydrochloric Acid, Sodium Hydroxide, Koch Kleen	Cartridge Respirator	TC-23C-0146 <u>Yellow</u>
				TC-84A-6702 <u>Olive / TC-84A-0359</u> <u>Magenta</u>
Water Plant HVAC Chiller System Room #8	Chiller Refrigerant	SUVA 134a	SCBA	TC-13F-30
Water Plant Lake Pump Station -KMNO4 Room	Cleaning KMNO4 Room	Sodium Bisulfite Solutions 38%	Dust Respirator <u>Severe Case</u> SCBA	TC-21C-335
Water Plant Chemical Room #142	Cleaning Lines	Aqua Ammonia	SCBA	TC-13F-30
			SAR	
Water Plant Maintenance Shop Room #136	Sandblasting	Silica Sand & Dust	Dust Mask	TC-84A-1298N-100



RESPIRATOR USAGE INFORMATION ATTACHMENT B

Company Name: _____

JOB TITLE that this is being completed for: _____

{An employee may have two job descriptions which require a respirator to be worn. Example: An employee's full-time job position is a pipe fitter, which he/she wears a respirator for, and this employee is ALSO a part of a first responder team, firefighter team, or Hazmat team. You would use the job description which has the highest potential for level of usage, which would be the first responder team, firefighter team, etc.}

Date Completed: _____ Completed by: _____

1. Type of respirator used by employee
 - a. _____ N, R, or P disposable respirator (filter-mask, non-cartridge type only)
 - b. _____ Half face piece type
 - c. _____ Full face piece type; powered-air purifying
 - d. _____ Self Contained Breathing Apparatus (SCBA)

2. Frequency of Use	Duration of use
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_____ Never	_____ Rescue	_____ Less Than ¼ hour
_____ Seldom	_____ Escape	_____ Less than ½ hour
_____ Monthly	_____ Weekly	_____ ½ hour to 1 hour
_____ Daily		_____ More than 1 hour

3. The expected physical work effort during the period of use of respirator

Level of use	Definition
_____ Light	Sitting while writing, typing, drafting, or performing light assembly work; or standing while controlling machines
_____ Moderate	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 35lbs) 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.
_____ Heavy	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)

4. Any additional protective clothing and equipment to be worn YES / NO
If yes please explain.

5. Will there be any temperature and humidity extremes that may be encountered YES/ NO
If yes, please explain.

EXHIBIT II (page 2 of 7)

Attachment B (continued)



RESPIRATOR CLEARANCE EVALUATION DEFINITIONS To determine if usage is Light, Moderately Strenuous, or Heavy)

Our respirator approval is classified as a Level 1, Level II, Level III, or HazMat/Fire- fighting. This is based on the type of use, type of respirator and degree of effort.

The following is a definition of the effort levels we use:

♦ LIGHT

- Less than 2 METS
- Examples: Sedentary work, light machine operation, bench top assembly work, sitting, small copper tooling, small assembly work, standing, sweeping floor, walking one mile an hour.

♦ MODERATELY STRENUOUS

- 2-5 METS
- Examples: Auto repair, chisel carving with mallet, drill press operation, hammering nails, janitorial work, lathe operator. Painting, hand polishing, power sander operation, electronic assembly, scrubbing-standing, using manual hand tools, walking 2 miles an hour. Brick laying, cleaning windows, lifting 3-5 pound objects overhead repetitively, machine assembly, machinist-engineer, pushing the equivalent of a power lawn mower, planing soft wood, power hand sawing, pushing wheelbarrow with 100 pound load, scrubbing on knees, sweeping or raking, walking at 3 miles an hour, welding moderate load. Assembly line work, light carpentry and masonry, mopping floor painting, pushing a wheelbarrow of 115 pounds at 2.5 miles an hour, walking 3.5 miles per hour.

♦ HEAVY

- Greater than 5 METS
- Examples: Carrying 20 pounds, digging and mixing soil, pumping a tire by hand, walking 4 miles an hour, medium to heavy carpentry, carrying 50 pounds, shoveling for 10 minutes with 10 pounds per shovel load, sawing by hand, walking 5 miles an hour and carrying 80 pounds, jogging 5 miles per hour. Climbing stairs with 17 pound load, climbing then descending two flights of stairs, hand planing hard wood, shoveling 14 pounds per shovel load for 10 minutes, pushing furniture, lifting 85-100 pounds and climbing a ladder. Firefighting – Peak (12-14 METS).

EXHIBIT II (page 3 of 7)



ThedaCare At Work - Appleton
2809 N Park Drive Lane Appleton WI 54911
PHONE: (920) 380-4999 FAX (920) 380-4961

ThedaCare At Work - Oshkosh
600 N Westhaven DR Oshkosh, WI 54904
PHONE: (920) 237-5600 FAX: (920) 237-5601

OSHA Respirator Medical Evaluation Questionnaire (Mandatory)

If you have any questions, contact ThedaCare At Work - Appleton (920) 380-4999

To the employee: Can you read (check yes or no): ☐ Yes ☐ No

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

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: _____ (month/day/year) Company Name: _____

2. Print Your Name: _____ Social Security #: _____ - _____ - _____

3. Address: _____

4. Your Age (to nearest year): _____ 5. Sex: ☐ Male / ☐ Female 6. Your height: _____ ft _____ in
7. Your Weight: _____ pounds 8. Your Job Title: _____
9. A phone number where you can be reached by the healthcare professional who reviews this questionnaire (include the Area Code): (_____) _____ - _____

Best time to phone you at this number: _____

10. Has your employer told you how to contact the healthcare professional who will review this questionnaire (check yes or no): ☐ Yes ☐ No
11. Check the type of respirator you will use (you can check more than one category):

☐ N, ☐ R, or ☐ P Disposable Respirator (filter-mask, non-cartridge type only)
☐ Half- or full-face piece type, powered-air purifying, supplied-air
☐ Self-contained breathing apparatus (SCBA)

12. Have you worn a respirator? ☐ Yes ☐ No If "yes," what type(s): _____

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

1. Do you currently smoke tobacco, or have you smoked tobacco in the last month: ☐ Yes ☐ No
2. Have you ever had any of the following conditions?

Seizures (fits)	☐ YES ☐ NO
Diabetes (sugar disease)	☐ YES ☐ NO
Allergic reactions that interfere with your breathing	☐ YES ☐ NO
Claustrophobia (fear of closed in places)	☐ YES ☐ NO
Trouble smelling odors	☐ YES ☐ NO

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

Asbestosis	☐ YES ☐ NO	Silicosis	☐ YES ☐ NO
Asthma	☐ YES ☐ NO	Pneumothorax (collapsed lung)	☐ YES ☐ NO
Chronic Bronchitis	☐ YES ☐ NO	Lung Cancer	☐ YES ☐ NO
Emphysema	☐ YES ☐ NO	Broken Ribs	☐ YES ☐ NO
Pneumonia	☐ YES ☐ NO	Any chest injuries or surgeries	☐ YES ☐ NO
Tuberculosis	☐ YES ☐ NO	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?

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 with other people at an ordinary pace on level ground	☐ YES ☐ NO
Have to 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 (thick sputum)	☐ 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 last month:	☐ YES ☐ NO
Wheezing	☐ YES ☐ NO
Wheezing that interferes with your job:	☐ YES ☐ NO
Chest pain when you breathe deeply:	☐ YES ☐ NO
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?

Heart attack	☐ YES ☐ NO	Swelling in your legs or feet (not caused by walking)	☐ YES ☐ NO
Stroke	☐ YES ☐ NO	Heart arrhythmia (heart beating irregularly)	☐ YES ☐ NO
Angina	☐ YES ☐ NO	High blood pressure	☐ YES ☐ NO
Heart Failure	☐ YES ☐ NO	Any other heart problem that you have been told about	☐ YES ☐ NO

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

Frequent pain or tightness in your chest	☐ YES ☐ NO	In the past two years have you noticed your heart skipping or missing a beat	☐ YES ☐ NO
Pain or tightness in your chest during physical activity	☐ YES ☐ NO	Heartburn or indigestion that is not related to eating	☐ YES ☐ NO
Pain or tightness in your chest that interferes with your job	☐ YES ☐ NO	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?

Breathing or Lung Problems	☐ YES ☐ NO	Blood Pressure	☐ YES ☐ NO
Heart Trouble	☐ YES ☐ NO	Seizures (fits)	☐ YES ☐ NO

8. If you've used a respirator, have you ever had any of the following problems?

(If you've never used a respirator, go to question 9)

Eye Irritation	☐ YES ☐ NO	General weakness or fatigue	☐ YES ☐ NO
Skin Allergies or Rashes	☐ YES ☐ NO	Any other problem that interferes with your use of a respirator	☐ YES ☐ NO
Anxiety	☐ 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-face piece 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?

Wear contact lenses	☐ YES ☐ NO	Are you color blind?	☐ YES ☐ NO
Wear glasses	☐ YES ☐ NO	Any other eye or vision problem?	☐ YES ☐ NO
Do you wear glasses at work?	☐ 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?

Difficulty hearing? ☐ YES ☐ NO	Wear a hearing aid? ☐ YES ☐ NO	Any other hearing or ear problem? ☐ YES ☐ NO
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14. Have you ever had a back injury?

☐ Yes ☐ No

15. Do you currently have any of the following musculoskeletal problems?

Weakness in any of your arms, hands, legs, or feet?	☐ YES ☐ NO	Difficulty fully moving your head side to side	☐ YES ☐ NO
Back Pain	☐ YES ☐ NO	Difficulty bending at your knees	☐ YES ☐ NO
Difficulty fully moving your arms and legs?	☐ YES ☐ NO	Difficulty squatting to the ground	☐ YES ☐ NO
Pain or stiffness when you lean forward or backward at the waist	☐ YES ☐ NO	Climbing a flight of stairs or a ladder carrying more than 25 lbs	☐ YES ☐ NO
Difficulty fully moving your head up or down	☐ YES ☐ NO	Any other muscle or skeletal problem that interferes with using a respirator	☐ YES ☐ NO

Part B: Any of the following questions, & 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:

If "yes" name the chemicals if you know them: ☐ Yes ☐ No

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

Asbestos	☐ YES ☐ NO	Coal (e.g. mining)	☐ YES ☐ NO
Iron	☐ YES ☐ NO	Silica (e.g. in sandblasting)	☐ YES ☐ NO
Tin	☐ YES ☐ NO	Tungsten/cobalt (e.g grinding or welding this material)	☐ YES ☐ NO
Beryllium	☐ YES ☐ NO	Dusty Environments	☐ YES ☐ NO
Aluminum	☐ YES ☐ NO	Any other hazardous exposures?	☐ YES ☐ NO

If "yes," to question 3 page 12, describe these exposures: _____

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

5. List your previous occupations: _____

6. List your current and previous hobbies: _____

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

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

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

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

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

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

HEPA Filters?	Canisters (e.g. gas masks)	Cartridges
☐ YES ☐ NO	☐ YES ☐ NO	☐ YES ☐ NO

11. How often are you expected to use the respirator(s) check "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
2-4 hours per day	☐ YES ☐ NO	Over 4 hours per day	☐ YES ☐ NO

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

LIGHT WORK EFFORT - Sitting while writing, typing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs) or controlling machines.

a. Light (less than 200 kcal per hour):

☐ Yes ☐ No

If "yes", how long does this period last during the average: Shift: _____ Hours _____ Minutes

MODERATE WORK EFFORT - 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.

b. Moderate (200 to 350 kcal per hour):

☐ Yes ☐ No

If "yes", how long does this period last during the average: Shift: _____ Hours _____ Minutes

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.).

c. Heavy (above 350 kcal per hour):

☐ Yes ☐ No

If "yes," how long does this period last during the average: Shift : _____ Hours _____ Minutes

13. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator:

☐ Yes ☐ No

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

14. Will you be working under hot conditions (temp. exceeding 77 degrees. F):

☐ Yes ☐ No

15. Will you be working under humid conditions:

☐ Yes ☐ No

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

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

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

Name of the **FIRST** toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

Name of the **SECOND** toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

Name of the **THIRD** toxic substance: _____

Estimated maximum exposure level per shift: _____

Duration of exposure per shift: _____

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

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

EXHIBIT III

Respirator User Training and Education

1. The user will be instructed in the nature of the hazards for which the respiratory protection is being provided and informed of possible consequences which may occur if exposed to the hazard without adequate protection.
2. Instruction will include a discussion of the respirator's capabilities and limitations.
3. A detailed discussion of the user's responsibility for inspection of equipment prior to use and methods of inspection will be included. Each user will have a respirator during this part of training.
4. Instruction and training will include storage, cleaning and maintenance.
5. Instructions on donning methods, proper fitting and adjustment of the equipment will be given. Each user will then don the equipment in an atmosphere of normal air, prior to a fit testing exercise.
6. Fit testing specific for the particular respirator will be given.
7. A record of employees and the dates and types of initial training and subsequent refresher training will be maintained.

TRAINING RECORD

Name	Department	Respirator Type	Date

(Signature of Trainer)

EXHIBIT IV

RESPIRATOR FIT TEST FORM

(The respirator should be worn for at least 5 minutes before the start of the fit test.)

Employee will fill in this section:

Employee Name: _____ **Date:** _____

Department: _____ **Job Title:** _____

Date of last spirometry/physical: _____

Type and brand of respirator: _____ Size: _____

Respiratory Hazards Encountered: _____

Supervisor will observe this section:

- | | | | |
|----|---|------------------------------|-----------------------------|
| 1. | Employee shown how to don and adjust respirator for proper fit? | ☐ Yes | ☐ No |
| 2. | Position of mask on nose, chin and cheeks? | ☐ Yes | ☐ No |
| 3. | Room for eye protection? | ☐ Yes | ☐ No |
| 4. | Room to talk? | ☐ Yes | ☐ No |
| 5. | Proper fit observed by evaluator? | ☐ Yes | ☐ No |

Supervisor will observe the following

Note: The respirator should be worn at least 5 minutes before start of the test

Fit Testing:

Positive Pressure Test

Employee closes off exhalation valves, exhales and tests for slight pressure build up. ☐ Yes ☐ No

Negative Pressure Test

Employee closes off inlets, inhales and tests for slight face piece collapse that lasts for 10 seconds.

☐ Yes ☐ No

Note: a. Fire personnel or other qualified individuals will perform this

b. The respirator shall not be adjusted once the fit test exercise begins. Any adjustment voids the test.

Fit Test Method Used (Circle which one is used: irritant smoke, saccharine, amyl acetate, other)

(Circle which type: basic smell test, machine monitored, loss of pressure)

- | | | |
|--|-------------------------------|-------------------------------|
| 1. Normal breathing (no talking) | ☐ Pass | ☐ Fail |
| 2. Deep breathing (slowing and deeply) | ☐ Pass | ☐ Fail |
| 3. Turning head side to side (slowly) | ☐ Pass | ☐ Fail |
| 4. Moving head up and down | ☐ Pass | ☐ Fail |
| 5. Talking | ☐ Pass | ☐ Fail |
| 6. Grimacing (smiling or frowning) | ☐ Pass | ☐ Fail |
| 7. Bending over | ☐ Pass | ☐ Fail |
| 8. Normal breathing | ☐ Pass | ☐ Fail |

Test Conductor: _____

Employee Signature: _____

EXHIBIT V

Non-Routine; Emergency; and Self-Contained Respirators

Respirator Use and Maintenance Record

Respirator Type: _____

Manufacturer: _____

Model Number: _____

NIOSH Approval No. _____

Date Placed in Service: _____ Cartridge Exp. Date: _____

Shelf Life: _____

Assigned to whom: _____

Inspection and Maintenance Record:

Date	Serviced By	Comments

Respiratory Program Evaluation

1. Are records complete and up to date? Yes _____ No _____
If no, what action has been taken to improve future performance?

2. Has air contaminant monitoring been conducted at operations where new materials or production processes are in use? Yes _____ No _____

3. Are employees wearing the proper respirators? Yes _____ No _____
If no, what action has been taken to ensure that employees wear appropriate respirators?

4. Have employees who wear respirators had a medical evaluation and were they fit tested?
Yes _____ No _____

5. Have all employees completed their initial or refresher respirator training?
Yes _____ No _____

6. Do employees who have completed training understand limitations, use and inspection of respirators?
Yes _____ No _____

If no, what improvements in the training program are being implemented?

Date: _____ Signature: _____