

THE UNIVERSITY OF TEXAS AT TYLER
Respiratory Protection Program

1.0 PURPOSE

The purpose of the Respiratory Protection Program is to provide all employees adequate respiratory protection if it is necessary for them to work in an atmosphere which may contain air contaminants or in areas which may lack sufficient oxygen to sustain life. The program establishes essential elements for implementing effective respiratory protection.

Engineering measures such as closed processes; local exhaust ventilation or chemical substitution shall be used as the primary means of controlling air contaminants. When engineering controls are not adequate or during implementation of engineering controls, the requirements of this program shall be followed.

2.0 PROGRAM ADMINISTRATION

2.1. Administrator

The Director of Environmental Health and Safety is responsible for the development, documentation, and administration of the Respiratory Protection Program.

2.2. Responsibilities include:

- a. Develop a written Respiratory Protection Program, which includes a standard operating procedure document.
- b. Evaluate respiratory hazards in the work environment.
- c. Provide guidance to campus personnel for the selection and purchase of NIOSH approved respirators.
- d. Provide instruction to personnel on the proper use, maintenance, and storage of respirator equipment.
- e. Provide a fit testing program for personnel wearing respirators.
- f. Maintain fit testing and training records.
- g. Evaluate the overall effectiveness of the respirator program.

3.0 PROGRAM REQUIREMENTS

3.1. Equipment Selection:

All respirators used on campus will be approved by the National Institute of Occupational Safety and Health (NIOSH) or the Mine Safety and Health Administration (MSHA).

3.2. Hazard Assessment:

A respiratory hazard assessment is required in order to insure selection of the appropriate respirators. The hazard assessment will be based on: 1) the oxygen content of the atmosphere and 2) identification, toxicity, warning properties, actual or estimated airborne concentration and nature of the contaminant.

3.3. Procurement:

The Environmental Health and Safety Department will purchase and stock respiratory protection equipment.

3.4. Worksite-specific Procedures:

The Environmental Health and Safety Department is responsible for clearly defining jobs that may require respiratory protection and the type of respirator needed to do the job safely. Written worksite-specific procedures shall be used to specify the type of respirator required for the task. Examples of worksite-specific procedures include standard operating procedures, safe work permits and warning signs.

4.0 RESPIRATORY PROTECTIVE EQUIPMENT

4.1. Air-Purifying Respirator:

- a. The breathing action of the wearer operates the non-powered type of respirator. Equipped with a tight-fitting face piece and filter(s), the respirator is secured to the face by means of a strap or harness.
- b. The *dust* mask is a single-use respirator generally approved only for nuisance dusts such as cement and hay dusts. These are discarded when resistance to breathing becomes excessive.
- c. The *half mask* and *full-face piece* respirators provide greater protection than the dust mask because their design allows for a better fit. These respirators provide protection against dusts, mists, fumes, vapors, gases, or any combination of these contaminants depending on the type of filter used.
- d. Many different filter elements are available. *Vapor cartridges* should be changed when odors “breakthrough” and are noticeable inside the mask. It is important to choose the right filter cartridge for a given job.

4.2. Self-contained breathing apparatus (SCBA):

There are currently no requirements for SCBA use by employees. Should SCBA be required, outside contractors or emergency response personnel will be called and perform entry/rescue.

4.3. Emergency Evacuation Air:

Emergency evacuation supplied air is available in the Power Plant providing 5 minutes of breathable air for exiting the building in an emergency by means of a completely enclosed hood and carry-tank of compressed breathing air.

Power Plant employees will receive instruction on how to use the emergency packs.

4.4. Particulate Respirator Selection:

- a. NIOSH has developed a set of regulations in 42 CFR 84.

The regulation provides for nine classes of filters.

- 3 levels of filter efficiency – 95%, 99% and 99.97% each with
- 3 levels of resistance to filter efficiency degradation – Labeled N, R, and P.

For example, a filter marked N95 would mean an N-series filter that is at least 95% efficient. Chemical cartridges that include particulate filter elements will carry a similar marking that pertains only to the particulate filter element.

- b. *Selection of N-, R-, and P-series filters* depends on the presence or absence of oil particles, as follows:

- * If no oil particles are present in the work environment, use a filter of any series (N-,R-, or P-series).
- * If oil particles (e.g., lubricants, cutting fluids, glycerin, etc.) are present, use an R- or P- series filter. *Note:* N-series filters cannot be used if oil particles are present.
- * If oil particles are present and the filter is to be used for more than work shift, use only a P-series filter.
- * Helpful guide:
 - N = Not oil resistant
 - R = Oil resistant
 - P = Oil-Proof

- c. Selection of filter efficiency (i.e., 95%, 99%, or 99.97%) depends on how much filter leakage can be accepted. Higher filter efficiency means lower filter leakage.

- d. The choice of face piece depends on the level of protection needed – that is, the assigned protection factor (APF) needed.

5.0 MEDICAL EVALUATION PROCEDURES

5.1. Evaluator Qualification

A medical evaluation will be made by a physician or other licensed health care professional (PLHCP) to determine if the employee is medically able to use respiratory protective equipment. The medical questionnaire is part of the medical record and considered confidential. The medical evaluation/questionnaire shall be administered confidentially during normal working hours and should describe the procedures for review and any required medical follow-up examinations. *The medical questionnaire is shown in Appendix F.*

5.2. Provided Information

The Environmental Health and Safety Department shall provide the PLHCP with any required supplemental information that will assist in the medical evaluation. Included will be the rationale for respirator use and the exposures expected in the course of use.

5.3. Minimum Requirements

At the minimum, employer must provide additional medical evaluations, if:

- a. Employee reports medical signs or symptoms related to the ability to use a respirator.
- b. PLHCP, supervisor, or program administrator informs the employer that an employee needs to be reevaluated.
- c. Information from the respirator program, including observations made during fit testing and program evaluation, indicates a need.
- d. Change occurs in workplace conditions that may substantially increase the physiological burden on an employee.

6.0 FIT TESTING

6.1. Qualitative Fit Tests

The worker is exposed to an atmosphere containing an odorant and then asked to: breath deeply, move head side to side, move head up and down, and talk. The worker reports any noticeable odor that is leaking into the mask.

6.1.1. Banana Oil Test:

This chemical has a pleasant, easily detectable odor, which is used to check the face piece seal when organic vapor cartridges are used. If the user detects any odor, it is an indication that the fit is faulty, and that adjustment to the respirator seal is required. This test has two limitations, the odor threshold varies widely among individuals and odor fatigue can occur.

6.1.2. Irritant Smoke Test:

This test involves exposing the worker to an irritating aerosol produced by a smoke tube. If the user detects any irritant smoke, it is an indication that the fit is faulty, and adjustment to the respirator seal is required. This test has an advantage in that the worker usually reacts involuntarily to any leakage by coughing or sneezing. Only properly trained personnel should conduct the irritant smoke fit test.

6.2. Field Fit Checks

After successfully completing an initial EH&S fit test, employees should check the fit of their respirator immediately before and periodically during respirator use in the field.

6.2.1. Positive Pressure Check:

Cover the exhalation valve with your hand and exhale gently into the face piece. If a slight positive pressure is built up inside the face piece without any evidence of leakage, the fit is satisfactory. This test method is the most widely used to check proper fit in the field.

6.2.2. Negative Pressure Check:

Close off the inlet valves (i.e., cover the cartridges with your hands), inhale gently to collapse the face piece slightly, and hold your breath for 10 seconds. If the face piece remains slightly collapsed and no leakage is detected, the respirator fits properly. It may be difficult to get a good seal when trying to cover the inlet valves (cartridges).

6.3. Considerations For Proper Fit

6.3.1. Facial Hair:

A person who has hair (Stubble, moustache, sideburns, beard, low hairline or bangs) which interferes with the functions of the respirator valve(s) shall not be permitted to wear a respirator.

6.3.2. Glasses and Eye/Face Protective Devices:

If a spectacle, goggle, face shield or welding helmet must be worn with a respirator, it shall be worn so as not to adversely affect the respirator seal. A spectacle, which has temple bars, or straps, which pass between the sealing surface of a respirator face piece and the wearers face, shall not be used. If a full-face piece respirator is used, special prescription glasses are available if needed.

7.0 CARE, USE, AND MAINTENANCE

7.1. Normal Operations

Each operating area has the responsibility of ensuring that their employees properly use and care for the respirators worn in their area.

- a. Cleaning and disinfecting shall occur according to the manufacturer's instruction.
- b. Respirators shall be regularly cleaned and disinfected after each use. Respirators issued for the exclusive use of one worker may be cleaned as often as necessary. Weekly or monthly cleaning is adequate. Shared respirators or emergency respirators must be cleaned and disinfected after each use.
- c. Remove any filters or cartridges from respirators and discard. Disassemble valves and other reusable face piece parts.
- d. Wash the face piece and associated parts with a mild detergent and warm water. Liquid dish washing detergent works well. Do not use organic solvents.
- e. Rinse the respirator face piece and parts in clean water.

- f. Prepare a disinfectant solution to kill the germs. Mixing 2 tablespoons of bleach per gallon of water is also a suitable disinfectant. Other commercially available disinfectants can be used if recommended by the manufacturer. Disinfectant wipes (70% isopropyl alcohol) can also be used.
- g. Immerse the face piece and parts in the disinfectant solution for two minutes. Rinse with clean water and dry overnight

7.2. Storage

- a. Respirators shall be accessible to the work area and stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. They shall be stored to prevent deformation of the face piece and exhalation valve and in accordance with the manufacturer's instructions.
- b. Emergency respirators shall be stored in durable compartments that are easily accessible and clearly marked.

7.3. Inspection Procedures and Schedules

- a. The following guidelines apply to respirator inspection:
 - Employees shall inspect the respirator before each use.
 - Each respirator shall be inspected during cleaning.
 - Emergency respirators shall be inspected monthly and before and after each use.
 - Escape respirators shall be inspected prior to being located in the workplace for use.
 - All respirators are checked for function, tightness of connections, condition of the face piece, head straps, valves, gaskets, connecting tube, cartridges, canisters or filters.
 - Any elastic parts are checked for pliability and signs of any deterioration.
 - *See Appendices for Inspection Checklist*
- b. Air cylinders and other respiratory equipment shall be checked monthly to ensure the cylinder is charged above 90% of the manufacturer's recommended pressure level and that the regulator and warning devices function properly.
- c. Emergency use respirators shall have a certification documenting the date of inspection, the name of the inspector, findings, required remedial action, and the serial number or other means of identifying the respirator. This information shall be provided on a tag or label kept with the respirator.

7.4. Repair and Replacement Parts

Consult the manufacturer or distributor for replacement parts and filters. The Environmental Health and Safety Department has a list of replacement parts and filters for each respirator model. Only experience persons shall do replacement or repairs with parts designed for respirators. Any replacement, adjustments and repairs shall be made in accordance with the manufacturer's instructions. Defective respirators shall be removed from service. The

Environmental Health and Safety Department is to be contacted for inquiry of repair and replacement.

8.0 SUPPLIED AIR QUALITY

This University specifically uses supplied compressed air tanks issued to the power plant facilities for evacuation purposes.

- a. Cylinders used to provide breathing air shall be tested and maintained as described in the *Shipping Container Specification of the Department of Transportation* (49 CFR part 173 & 178). Cylinders of breathing air that are purchased shall have a certificate of analysis from the supplier indicating that the breathing air meets the requirements for Type 1.D breathing air and that the moisture content in the cylinder does not exceed a dew point of -50°F at 1 atmospheric pressure.
- b. Compressors used to supply breathing air shall be situated to prevent entry of contaminated air into the air-supply system. The system shall be equipped with in-line sorbent beds and filters as necessary to further assure breathing air quality. Maintenance and periodic replacement of sorbent beds and filters shall be conducted in accordance with manufacturer's instructions and tag or other record of the replacement shall be maintained.
- c. The dew point of breathing air used with supplied-air respirators should be lower than the lowest ambient temperature to which any regulator or control valve on the respirator supplied-air system will be exposed. *Moisture content of the system shall be minimized so that the dew point at 1 atmosphere pressure is 10°F below the ambient temperature.*
- d. Oil-lubricated compressors shall use a high temperature alarm or carbon monoxide alarm or both to monitor carbon monoxide levels. *If only high temperature alarms are used, carbon monoxide monitoring shall be conducted at intervals sufficient to ensure levels do not exceed 10 ppm.* For compressors that are not oil-lubricated, the site shall document a process to ensure that carbon monoxide levels do not exceed 10 ppm.

9.0 TRAINING

9.1. Training will include:

- Completion of the EH&S respirator certification/medical questionnaire.
- Use of respirators in accordance with instruction received from the department of EH&S.
- The limitations and capabilities of each respirator to be worn.
- What to do in an emergency while wearing respiratory protection.
- How to inspect, put on and remove, use and check the seals of the respirator.
- Steps for proper maintenance and storage of the respirator.
- How to recognize signs and symptoms that might limit or prevent effective use of the respirator.
- *The general requirements of OSHA 49 CFR 1910. 134.*

9.2. Testing

Employees must be able to demonstrate knowledge imparted by the training. Training may be delivered by an instructor or through written modules, videos, interactive computer programs or any combination of these examples. A skill check must be administered to demonstrate the employee's knowledge of the essential training elements. A record of the training shall be maintained in the EH&S department.

10.0 PROGRAM EVALUATION

10.1. Frequency

- a. Evaluations shall be conducted periodically, as specified by the EH&S department director.
- b. Employees who use respirators shall be regularly consulted to help determine the program effectiveness and to help identify problems. Employees should be consulted about information concerning:
 - c. Respirator fit.
 - d. Ability to use respirators without interfering with effective work performance.
 - e. Appropriate respirator selection for the hazards.
 - f. Proper respirator use under workplace conditions.

10.2. RECORDKEEPING

10.2.1. Training

A record of the training shall be maintained in the EH&S department until the next training is administered.

10.2.2. Medical Evaluation

Medical evaluation records shall be retained for the duration of employment plus 30 years.

10.2.3. Fit Testing

Fit testing records shall specify the employee name, the type of test, respirator type, test date and fit test results. Records shall be retained until the next fit test is administered.

10.2.4. Inspection

Emergency use respirators will be inspected monthly and the record shall be kept until the next certification is completed. The inspection record shall specify the inspection date, name of inspector, findings, remedial action and a means to identify the respirator.

11.0 APPENDICES

Appendix A.....	OSHA Standard 29 CFR 1910.134
Appendix B.....	NIOSH Approved Respirators
Appendix C.....	Respirator Fit Checks
Appendix D.....	Fit Test Record
Appendix E.....	Respirator Inspection Checklist
Appendix F.....	Medical Form

Appendix A: OSHA Standard 29 CFR 1910.134

<http://www.osha.gov/html/respirator.html>

Appendix B: NIOSH Approved Respirators

www.cdc.gov/niosh/npptl

Appendix C: Respirator Fit Checks

It's your responsibility to fit check before each use

For a respirator to be effective, it must seal properly to the face. Before entering an area or conducting work that requires a respirator, conduct a fit check to ensure it will keep out the air contaminants. Inspect respirator before wearing

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. Replace respirator if defective

Negative Pressure Check

Close off the inlet opening of the canister or cartridge(s) by covering it 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 your breath for ten seconds. The design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand, which requires that the test be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove. If the face piece remains slightly collapsed, and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

Manufacturer's Procedures

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 they are equally effective in detecting seal leakage compared to the positive pressure and negative pressure checks described above.

Appendix D: Fit Test Record

**The University of Texas at Tyler
Environmental Health and Safety Department**

TO: _____

Your Signature on this Fit Test Record will attest to your having been properly fit tested in accordance with OSHA requirements and have received and understood basic instruction in the use, maintenance, care and limitations of the respirator used as identified below.

The fit testing program consist of the following items:

1. Verification of physician clearance.
2. An explanation of the problems involved in misusing the respirator.
3. The limitations of the respirator that has been selected.
4. How to wear respirator and properly adjust the face piece and tension straps.
5. Conditions that could prohibit proper seal are defined. (i.e. facial hair, significant dental changes, weight loss/gain, facial scarring, eye glasses).
6. How to wear the respirator.
7. Essential points regarding care and maintenance.
8. How to inspect the respirator.
9. When to use an Air Purifying Respirator.
10. When a type C supplied-air respirator is required.
11. Explanation of how a proper fit-test is conducted.
12. Proper steps for positive/negative self fit test are demonstrated; purpose of self fit-test explained.

EMPLOYEE'S SIGNATURE _____ DATE _____

RESPIRATOR TEST SUMMARY

Name of Employee: _____ Date Tested _____

Respirator Selected:

Manufacturer: _____ Model #: _____

Respirator Size: _____

MSHA/NIOSH Approval NO: _____

Type(s) of Test Conducted: _____

Testing Agent(s) Used: _____

Signature of Person Conducting Test: _____

Appendix E: Respirator Inspection Checklist

Checklist for Disposable Respirators

- Holes in filter
- Elasticity of straps
- Deterioration of straps and metal nose clip

Checklist for Air-Purifying Respirators

- Face piece:
 - Dirt
 - Cracks, tears, or holes
 - Distortion of face piece
 - Cracked, scratched, or loose fitting lenses

Head straps:

- Breaks or tears
- Loss of elasticity
- Broken buckles or attachments
- Worn serration's on head harness which might allow face piece to slip

Inhalation and Exhalation Valves:

- Dust particles, dirt or detergent residue on valve seat
- Cracks, tears, or distortion in valve material
- Missing or defective valve covers

Filter Elements

- Proper filter for the hazard
- Approval designation
- Missing or worn gaskets
- Worn threads on filter and face piece
- Cracks or dents in filter housing
- Deterioration of gas mask canister harness "service life" indicator, or end of service date

Supplied canister air tank

- Breathing air quality
- Breaks or kinks in hoses and fittings
- Setting of regulators and valves

Appendix F: Respiratory Protection Medical Form

All medical information is protected under the Health Insurance Portability and Accountability Act (HIPAA) Privacy Notice. [<http://www.tdh.state.tx.us>]

To the employer: Answers to questions in Section 1, and to question 9 in section 2 of Part A, do not require a medical examination.

To the employee:

Can you read? (circle one): Yes / No

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

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 year): _____
 4. Sex (circle one): Male/Female
 5. Your height: _____ ft. _____ in.
 6. Your weight: _____ lbs.
 7. Your job title: _____
 8. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): _____
 9. The best time to phone you at this number: _____
 10. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes/No
 11. Check the type of respirator you will use (you can check more than one category):
 - a. _____ N, R, or P disposable respirator (filter-mask, non- cartridge type only).
 - b. _____ Other type (for example, half- or full-facepiece type, powered-air purifying, supplied-air, self-contained breathing apparatus).
 12. Have you worn a respirator (circle one): Yes/No
If "yes," what type(s): _____
-

Part A. Section 2. (Mandatory)

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

1. Do you **currently** smoke tobacco, or have you smoked tobacco in the last month:
 Yes No

2. Have you **ever had** any of the following conditions?

	Yes	No
Seizures (fits):		
Diabetes (sugar disease):		
Allergic reactions that interfere with your breathing:		
Claustrophobia (fear of closed-in places):		
Trouble smelling odors:		

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

	Yes	No
Asbestosis:		
Asthma		
Chronic bronchitis		
Emphysema:		
Pneumonia:		
Tuberculosis:		
Silicosis:		
Pneumothorax (collapsed lung):		
Lung cancer:		
Broken ribs:		
Any chest injuries or surgeries:		
Any other lung problem that you've been told about:		

4. Do you **currently** have any of the following symptoms of pulmonary or lung illness?

	Yes	No
Shortness of breath:		
Shortness of breath when walking fast on level ground or walking up a slight hill or incline:		
Shortness of breath when walking with other people at an ordinary pace on level ground:		
Have to stop for breath when walking at your own pace on level ground:		
Shortness of breath when washing or dressing yourself:		
Shortness of breath that interferes with your job:		
Coughing that produces phlegm (thick sputum):		

Coughing that wakes you early in the morning:		
Coughing that occurs mostly when you are lying down:		
Coughing up blood in the last month		
Wheezing:		
Wheezing that interferes with your job:		
Chest pain when you breathe deeply:		
Any other symptoms that you think may be related to lung problems:		

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

	Yes	No
Heart attack:		
Stroke:		
Angina:		
Heart failure:		
Swelling in your legs or feet (not caused by walking):		
Heart arrhythmia (heart beating irregularly):		
High blood pressure:		
Any other heart problem that you've been told about:		

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

	Yes	No
Frequent pain or tightness in your chest:		
Pain or tightness in your chest during physical activity:		
Pain or tightness in your chest that interferes with your job:		
In the past two years, have you noticed your heart skipping or missing a beat:		
Heartburn or indigestion that is not related to eating:		
Any other symptoms that you think may be related to heart or circulation problems:		

7. Do you **currently** take medication for any of the following problems?

	Yes	No
Breathing or lung problems:		
Heart trouble:		
Blood pressure:		
Seizures (fits):		

8. If you've used a respirator, have you **ever had** any of the following problems? (If you've never used a respirator, skip the following and go to question 9:)

	Yes	No
Eye irritation:		
Skin allergies or rashes:		
Anxiety:		
General weakness or fatigue:		
Any other problem that interferes with your use of a respirator:		

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?

	Yes	No
Wear contact lenses		
Wear glasses:		
Color blind:		
Any other eye or vision problem:		

:

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?

	Yes	No
Difficulty hearing:		
Wear a hearing aid:		
Any other hearing or ear problem:		

14. Have you **ever had** a back injury: Yes No

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

	Yes	No
Weakness in any of your arms, hands, legs, or feet:		
Back pain:		
Difficulty fully moving your arms and legs:		

Pain or stiffness when you lean forward or backward at the waist:		
Difficulty fully moving your head up or down:		
Difficulty fully moving your head side to side:		
Difficulty bending at your knees:		
Difficulty squatting to the ground:		
Climbing a flight of stairs or a ladder carrying more than 25 lbs		
Any other muscle or skeletal problem that interferes with using a respirator:		

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

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

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

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

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

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

	Yes	No
Asbestos:		
Silica (e.g., in sandblasting):		
Tungsten/cobalt (e.g., grinding or welding this material):		
Beryllium:		
Aluminum:		
Coal (for example, mining):		
Iron:		
Tin:		
Dusty environments:		
Any other hazardous exposures:		

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: _____

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

	Yes	No
HEPA Filters:		✓
Canisters (for example, gas masks):		✓
Cartridges:	✓	

11. How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)?:

	Yes	No
Escape only (no rescue):		
Emergency rescue only:		
Less than 5 hours per week :	✓	
Less than 2 hours per day :	✓	
2 to 4 hours per day:		✓
Over 4 hours per day:		✓

12. Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator: []Yes []No

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

14. Will you be working under hot conditions (temperature exceeding 77 deg. F):
[]Yes []No

15. Will you be working under humid conditions: []Yes []No

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

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

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):

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):
