

## Environmental Health and Safety

### **Northern Arizona University Respiratory Protection Program**

#### **Policy**

No employee of Northern Arizona University (NAU) shall be issued or required to wear a respirator until the need for such protection is validated by Environmental Health & Safety (EHS) and the affected employee has met the criteria set forth by the Occupational Safety and Health Administration (OSHA). This program meets the general criteria for compliance with mandatory conditions set forth in the Respirator Protection standard (29 CFR 1910.134) promulgated by OSHA and enforced by the Arizona Division of Occupational Safety & Health (ADOSH). However, a more site-specific program may be necessary to more accurately reflect the various exposure risks to employees during the course of performing NAU work activities. Each department head/supervisor is encouraged to contact the NAU EHS office for assistance in completing a site-specific exposure assessment that accurately reflects representative exposure during routine and non-routine work activities.

#### **Permissible Practice**

In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (e.g., enclosure or confinement of the operation, general and local ventilation) or administrative control measures (e.g., substitution of less toxic materials). When effective engineering and/or administrative controls are not feasible or while they are being instituted, appropriate respirators shall be provided and used pursuant with this policy when such equipment is necessary to protect the health of the employee.

#### **Authority and Responsibility**

*Environmental Health and Safety* is responsible for:

1. Acting as the administrator of the Respiratory Protection Program;
2. Validating the need for respiratory protection devices;
3. Determining the adequate level of protection and identifying the appropriate cartridges necessary for the task;
4. Ensuring employees are physically able to perform the work and use the respirator by obtaining medical clearance from a physician;
5. Providing training in the proper use and care of the respiratory protection devices;

6. Conducting all fit-testing;
7. Maintaining all medical clearance forms and fit test records; and
8. Conducting a program evaluation.

*Departments* are responsible for:

1. Contacting Environmental Health and Safety to have a hazard assessment conducted to validate the need of respiratory protection devices;
2. Funding the medical screening portion of the program;
3. Purchasing and maintaining an inventory of respiratory protection devices and cartridges/filters;
4. Filling out OSHA medical questionnaire and bringing to NAU Campus Health Services at the Health & Learning Center for respirator clearance;
5. Making arrangements for employee physicals when deemed necessary by Campus Health Services;
6. Making arrangements for employee training and fit testing with Environmental Health and Safety;
7. Ensuring employees are wearing respiratory protection devices in conjunction with the requirements of this policy (e.g., no facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function);
8. Contacting Environmental Health and Safety if there is a change in facial features or additional fit testing is necessary; and
9. Contacting Environmental Health and Safety as necessary to report changes in workplace conditions that affect the use of a respirator.

*Employees* are responsible for:

1. Completing the mandatory medical questionnaire and any medical evaluation requirements deemed necessary by the evaluating physician;
2. Wearing respiratory protection devices in conjunction with all requirements of this policy (e.g., no facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function);
3. Providing medical clearance forms to Environmental Health and Safety;
4. Attending annual respirator training and fit testing;
5. Maintaining, cleaning and inspecting respiratory protection devices in accordance with this policy; and
6. Notifying their supervisor if a medical evaluation or additional fit testing is necessary.

*NAU Campus Health Services* is responsible for:

1. Reviewing the mandatory medical questionnaire drafted/submitted by an employee;
2. Conducting follow-up medical examinations as needed for employees giving a positive response to any question among questions 1-8 in Section 2, Part A on the medical questionnaire; and
3. Providing Environmental Health and Safety with the written recommendation regarding employees' ability to wear a respirator.

## **Volunteer Use of Respirators**

Where respirator use is not required, respirators shall be provided at the request of employees or employees shall be permitted to use their own respirators provided Environmental Health and Safety determines that such respirator use will not in itself create a hazard. If Environmental Health and Safety determines that voluntary respirator use is permissible, a copy of the **Voluntary Respirator Use Information** (Appendix A) shall be provided to the employee.

Each employee using a respirator voluntarily shall still meet the medical criteria of this policy to ensure he/she is medically able to use the respirator. The employee shall also follow all cleaning, storage and maintenance requirements in this policy to ensure that the respirator use does not present a health hazard to the user.

*Exception:* This does not apply to the voluntary use of filtering facepieces (**dust masks**).

## **Respirator Selection**

Environmental Health and Safety shall identify and evaluate respiratory hazard(s) in the workplace. This evaluation shall include a reasonable estimate of employee exposures to respiratory hazard(s) and an identification of the contaminant's chemical state and physical form. Where employee exposure cannot be identified or reasonably estimated, the atmosphere shall be considered to be **immediately dangerous to life and health (IDLH)**.

Environmental Health and Safety shall recommend an appropriate National Institute for Occupational Safety and Health (NIOSH) certified respirator based on the respiratory hazard(s) to which the worker is exposed and workplace and user factors that affect respirator performance and reliability. The respirator shall be adequate to protect the health of the employee and ensure compliance with all other OSHA requirements under routine and reasonably foreseeable emergency situations.

## **IDLH Protection**

For protection from IDLH atmospheres, one of the following respirators shall be provided:

- A full facepiece pressure demand self-contained breathing apparatus (SCBA) certified by NIOSH for a minimum service life of thirty minutes; or
- A combination full facepiece pressure demand supplied-air respirator (SAR) with auxiliary self-contained air supply.

Respirators provided only for escape from IDLH atmospheres shall be NIOSH-certified for escape from the atmosphere in which they will be used.

All oxygen deficient atmospheres shall be considered IDLH.

## **Gas and Vapor Protection**

For protection against gases and vapors, one of the following respirators shall be provided:

- An atmosphere-supplying respirator; or
- An air-purifying respirator, provided that the respirator is equipped with an end-of-service-life indicator (ESLI) certified by NIOSH for the contaminant or when there is no ESLI appropriate for conditions in the workplace Environmental Health and Safety shall implement a change schedule for canisters or cartridges that is based on objective information or data from the respirator manufacturer that will ensure that canisters and cartridges are changed before the end of their service life.

## **Particulate Protection**

For protection against particulates, one of the following respirators shall be provided:

- An atmosphere-supplying respirator; or
- An air-purifying respirator equipped with a filter certified by NIOSH under 30 CFR part 11 as a high-efficiency particulate air (HEPA) filter, or an air-purifying respirator equipped with a filter certified for particulates by NIOSH under 42 CFR part 84; or
- For contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least three micrometers, an air-purifying respirator equipped with any filter certified for particulates by NIOSH.

## **Tuberculosis Exposure Control**

For protection against TB/other infectious diseases (Covid-19, etc.), the following shall be provided following the conduction of the employee's exposure assessment warranting respirator use:

- An N-95 respirator certified by NIOSH under 42 CFR part 84 as a air purifying particulate respirator.

## **Medical Evaluation**

Using a respirator may place a physiological burden on employees that vary with the type of respirator worn, the job and workplace conditions in which the respirator is used and the medical status of the employee.

## **General**

A medical evaluation to determine the employee's ability to use a respirator shall be provided prior to the employee being fit tested or required to use a respirator in the workplace. All medical evaluations shall be discontinued when the employee is no longer required to use a respirator.

## **Medical Evaluation Procedures**

Employees shall obtain and complete a **medical questionnaire** (Appendix B). All completed questionnaires shall be filled out by the employee and brought to NAU Campus Health Services for review. The employee's supervisor shall provide the following information to Campus Health Services prior to the clinic making a recommendation concerning an employee's ability to use a respirator:

- The type and weight of the respirator to be used by the employee;
- The duration and frequency of respirator use (including use for rescue and escape);
- The expected physical work effort;
- Additional protective clothing and equipment to be worn;
- Temperature and humidity extremes that may be encountered;
- A copy of our Respiratory Protection Program; and
- A copy of OSHA's Respiratory Protection Standard.

## **Follow-up Medical Examination**

A follow-up medical examination shall be required for employees giving a positive response to any question among questions 1 through 8 in Section 2, Part A of the questionnaire.

The follow-up medical examination shall include any medical tests, consultations or diagnostic procedures that the physician deems necessary to make a final determination on clearance for respirator usage.

NAU Campus Health Services shall provide a written recommendation to Environmental Health and Safety regarding the employee's ability to use the respirator including any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator. Campus Health Services shall also identify the need, if any, for follow-up medical evaluations.

## **Additional Medical Evaluations**

At a minimum, additional medical evaluations shall be required if:

- An employee reports medical signs or symptoms that are related to the ability to use a respirator;
- The physician, supervisor or representative from Environmental Health and Safety recommends a re-evaluation;
- Information from the respiratory protection program, including observations made during fit testing and program evaluation, indicates a need for employee re-evaluation; or
- A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in substantial increase in the physiological burden placed on an employee.

## **Fit Testing Procedures**

Before an employee may be required to use any respirator with a negative or positive pressure tight-fitting facepiece, the employee shall be fit tested with the same make, model, style and size of respirator that will be used.

Environmental Health and Safety shall conduct and ensure employees pass an appropriate qualitative fit test (QLFT). Fit testing shall be conducted prior to initial use of the respirator, whenever a different respirator facepiece (e.g., size, style, model, make) is used and at least annually thereafter.

An additional fit test shall be conducted whenever any of the following occurs:

- Significant weight change (20 pounds or more);
- Significant facial scarring in the area of the facepiece seal;
- Significant dental changes;
- Reconstructive or cosmetic surgery; or
- Other conditions that may interfere with the facepiece seal.

If after passing a QLFT, the employee subsequently notifies Environmental Health and Safety that the fit of the respirator is unacceptable, the employee shall be given a reasonable opportunity to select a different respirator facepiece and be retested.

All fit tests shall be administered by Environmental Health and Safety in accordance with the Occupational Safety and Health Administration requirements found in 29 CFR 1910.134 Appendix A.

Fit tests will not be conducted on respirator users if they have facial hair that will affect the seal between the respirator and skin.

## **Respirator Use**

### **Facepiece Seal Protection**

Respirators with tight-fitting facepieces shall not be worn by employees who have:

- Facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function; or
- Any condition that interferes with the face-to-facepiece seal or valve function.

If an employee wears corrective glasses or goggles or other personal protective equipment, it shall be worn in a manner that does not interfere with the seal of the facepiece to the face seal of the user.

For all tight-fitting respirators, employees shall perform a user seal check in accordance with the User Seal Check Procedures to ensure that an adequate seal is achieved each time the respirator is worn.

## **Routine and Emergency Use Procedures**

Employees shall leave the respirator use area for the following reasons:

- To wash their faces and respirator facepieces as necessary to prevent eye or skin irritation associated with respirator use;
- If they detect vapor or gas breakthrough, changes in breathing resistance or leakage of the facepiece; or
- To replace the respirator or the filter, cartridge or canister elements.

If the employee detects vapor or gas breakthrough, changes in breathing resistance or leakage of the facepiece, the respirator shall be replaced or repaired prior to returning to the work area.

## **IDLH Atmospheres**

For all IDLH atmospheres:

- One employee, or when needed, more than one employee shall be located outside the IDLH atmosphere;
- Visual, voice or signal line communication shall be maintained between the employee(s) inside and outside of the IDLH atmosphere; and
- The City of Flagstaff Fire Department shall be contacted prior to entry into IDLH atmospheres to provide entry assistance, back-up assistance, and/or emergency rescue.

## **Maintenance and Care of Respirators**

### **Cleaning and Disinfecting**

All respirators provided to employees shall be clean, sanitary and in good working order. Respirators shall be cleaned and disinfected following the manufacturer's specifications at the following intervals:

- As often as necessary to be maintained in a sanitary condition when used exclusively by one employee;
- After each use when issued to more than one employee; and
- After each use when used for fit testing and training purposes.

### **Storage**

All respirators shall be stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and shall be packed or stored to prevent deformation of the facepiece and exhalation valve.

Emergency respirators shall be kept accessible to the work area, stored in compartments or covers clearly marked as containing emergency respirators and stored in accordance with any applicable manufacturer instructions.

## **Inspection**

Respirators used on a routine basis shall be inspected by the respirator user before each use and during cleaning.

Emergency use respirators shall be inspected by the respirator user before and after each use and at least monthly otherwise.

Emergency escape-only respirators shall be inspected by the user before being carried into the workplace for use.

Respirator inspections shall include the following:

- A check of respirator function, tightness of connections and the condition of the various parts including, but not limited to, the facepiece, head straps, valves, connecting tube and cartridges, canisters or filters; and
- A check of elastomeric parts for pliability and signs of deterioration.

Inspections of respirators maintained for emergency use shall be certified by documenting the date the inspection was performed, the name of the person who made the inspection, the findings, required remedial action and a serial number or other means of identifying the inspected respirator. This information shall be kept with the respirator and maintained until replaced with a subsequent certification.

## **Repairs**

Respirators failing inspections or otherwise found to be defective shall be removed from service and discarded, repaired or adjusted only by persons appropriately trained to perform such operations using only the respirator manufacturer's NIOSH-approved parts designed for the respirator.

Contact Environmental Health and Safety for guidance on obtaining replacement parts and/or repair information or service.

All compressed breathing air shall meet the requirements for Grade D breathing air described in American National Standards Institute (ANSI)/Compressed Gas Association Commodity Specification for Air, G-7.1-1989.

## **Training and Information**

Training shall be conducted by Environmental Health and Safety prior to requiring any employee to use a respirator in the workplace. This training shall utilize the "Respiratory Protection"



training booklet generated by Environmental Health and Safety. This training booklet shall be revised to include provisions of the revised standard, as revisions to the standard are published. Environmental Health and Safety shall ensure that each employee attending training is able to demonstrate knowledge of at least the following:

- Why the respirator is necessary and how improper fit, usage or maintenance can compromise the protective effect of the respirator;
- What the limitations and capabilities of the respirator are;
- How to use the respirator effectively in emergency situations, including situations in which the respirator malfunctions;
- How to inspect, put on and remove, use and check the seals of the respirator;
- What the procedures are for maintenance and storage of the respirator;
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; and
- The general requirements of the standard.

**Note:** The medical clearance portion of the four-part Respiratory Protection Processing form shall be provided to Environmental Health and Safety by the Supervisor for each employee on or before the day of training. If an employee has not been cleared to wear a respirator by Campus Health Services, they will not be allowed to attend training.

### **Retraining**

Retraining shall be administered annually and when the following situation occurs:

- Changes in the workplace or the type of respirator render previous training obsolete;
- Inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill; or
- Any other situation arises in which retraining appears necessary to ensure safe respirator use.

### **Program Evaluation**

Environmental Health and Safety shall conduct evaluations of the workplace to ensure this program is being properly implemented.

Environmental Health and Safety shall regularly consult employees required to use respirators to assess the employees' views on program effectiveness and to identify any problems. Any problems identified during this assessment shall be corrected. Factors to be assessed include, but are not limited to, the following:

- Respirator fit (including the ability to use the respirator without interfering with effective workplace performance);
- Appropriate respirator selection for the hazards to which the employee is exposed;
- Proper respirator use under the workplace conditions the employee encounters; and
- Proper respirator maintenance.

## **Recordkeeping**

### **Medical Evaluations**

Records of medical evaluations shall be retained by Environmental Health and Safety for the duration of employment and 30 years thereafter.

### **Fit Test Records**

Environmental Health and Safety shall maintain all copies of all fit test records until the next fit test is administered.

**Appendix A**  
**Volunteer Use of Respirators**

## **Information for Employees Using Respirators When Not Required Under the Standard (OSHA 29 CFR 1910.134 App D):**

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 or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

**Appendix B**

**Medical Questionnaire**

## Environmental Health and Safety

### **Respirator Medical Evaluation Questionnaire**

**(OSHA 29 CFR 1910.134, Appendix C)**

*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): \_\_\_\_\_

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*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?

a. Seizures (fits): Yes/No

b. Diabetes (sugar disease): 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

l. 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
- 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
- l. 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 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 or 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 them: \_\_\_\_\_

\_\_\_\_\_

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: \_\_\_\_\_

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

- 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** a wheelbarrow with a heavy load (about 100 lbs.) on a level surface.

c. **Heavy** (above 350 kcal per hour): Yes/No

If "yes," how long does this period last during the average shift: \_\_\_\_\_ hrs. \_\_\_\_\_ mins.

Examples of heavy work are **lifting** a heavy load (about 50 lbs.) from the floor to your waist or shoulder; working on a loading dock; **shoveling**; **standing** while bricklaying or chipping castings; **walking** up an 8-degree grade about 2 mph; climbing stairs with a heavy load (about 50 lbs.).

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 (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):

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):

\_\_\_\_\_

[63 FR 1152, Jan. 8, 1998; 63 FR 20098, April 23, 1998]