## Review and Updates

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<tr>
<td>Oct. 9, 2012</td>
<td>Mary Schlagel</td>
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<tr>
<td>August 1, 2014</td>
<td>Mary Schlagel</td>
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<tr>
<td>February 24, 2015</td>
<td>Mary Schlagel</td>
<td>To Duties section To Fit Test section To Facemask Seal Protection</td>
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<td>July 29, 2015</td>
<td>Mary Schlagel</td>
<td>Clarifying facial hair and fit testing.</td>
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<td>July 21, 2016</td>
<td>Mary Schlagel</td>
<td>To Responsibilities section Clarifying who needs to wear respiratory protection, SCBA inspection and testing.</td>
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<tr>
<td>July 17, 2017</td>
<td>Mary Schlagel</td>
<td>To section on Responsibilities, Respirator Selection Facemask Seal Protection</td>
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Appendix 5 – Mandatory Information for Employees Using Respirators When Not Required

Under the OSHA Standard (29 CFR App. D to Sec. 1910.124)
Northern Illinois University

Respiratory Protection Program

Purpose

Employee exposure to toxic dusts, fumes, mists, vapors and gases cannot always be effectively reduced through engineering or administrative controls. For short duration or infrequent exposure, controls may not be feasible. Respirators are to be used only where engineering control of respiratory hazards are not possible, while engineering controls are being installed or repaired, or in emergencies.

This program establishes written procedures for a respirator program as mandated by the Occupational Safety and Health Act (OSHA) 29 CFR 1926.103 and 29 CFR 1910.134. The program includes information on selection, training and instruction, cleaning and sanitization, inspection and maintenance and specific application procedures. Questions or concerns not addressed in the program should be directed to the Environmental Health & Safety Department (EH&S) at 753-0404.

Applicable Regulations and Standards

The following Federal regulations are referenced in this program and are available for review upon request:

- OSHA 29 CFR 1926.103 Construction – Respiratory Protection
- MSHA 30 CFR 11 Testing, Evaluation and Approval of Mining Products
- NIOSH 42 CFR 84 Approval of Respiratory Protective Devices
- DOT 49 CFR 173.216 Asbestos, blue, brown and white
- DOT 49 CFR 173.305 Gases, Preparation and Packaging – Leak Testing
- DOT 49 CFR 178.255-12 Pressure Testing of Portable Tanks
- DOT 49 CFR 178.348-5 Pressure and Leak Testing of Tanks

Scope

The scope of this program is to provide guidance to ensure compliance with all respiratory protection regulations and standards. In particular it is to provide respiratory protection to NIU employees from chemicals, particulates or biological agents that could lead to damage to the lungs or infectious illness.
Responsibilities

Department of Environmental Health and Safety (EH&S) responsibilities include:

- Managing the Respiratory Protection Program. EH&S is responsible for all facets of the program. It has developed written detailed instructions covering each of the basic elements in this program. EH&S reviews this program annually and reserves the right to modify the content as needed.

- Administering the Respiratory Protection Program. EH&S personnel are qualified by appropriate training and experience commensurate with the complexity of the program.

- Assessing potentially hazardous environments utilizing industrial hygiene sampling protocol if warranted.

- Conducting the employee respiratory safety training program.

- Advising employees on proper selection of respirators.

- Conducting employee respirator fit tests.

- Arranging (and if necessary scheduling) medical surveillance for participating employees.

- Reviewing and approving selection of respiratory protection prior to purchasing.

- Reviewing respiratory protection procedures.

Department Supervisor Responsibilities

- Supervisors shall see to it that the Personal Protective Equipment (PPE) or Job Hazard Analysis is completed for all positions in the department or shop.

- Supervisors/foremen are required to ensure the proper use of respirators for their staff and notify EH&S of actual or potential employee exposure problems.

- They are to see that respirators, respirator maintenance supplies and related accessories are provided at no cost to participating employees. Replace worn or damaged respirators as needed.

- Departments in possession of self-contained breathing apparatus (SCBAs) are responsible for the monthly inspection and maintenance of their SCBAs as well as the hydrotesting of the gas cylinders. Composite cylinders must be hydrotested every 3 years and taken out of service after 15 years. Metal bottles must be hydrotested every 5 years.

Employee Responsibilities

- Employees shall participate in the program if the job hazard analysis indicates respiratory protection is required. Employee shall use equipment properly and maintain respirators in good condition, and participate in all training and medical surveillance required.

- These employees are responsible for reporting respirator problems such as wear, damage
or clogged filters to the supervisor.

- Employees may review a copy of the Respiratory Protection Program at any time. It is located in EH&S at the Dorland Building and on-line on the NIU EH&S website.

- Employees that use or are assigned to use SCBAs when necessary shall inspect and document this inspection of their assigned SCBAs monthly.

### Respirator Selection

Respirators are selected on the basis of respiratory hazards to which the worker may be exposed, concentration of the hazardous material in the air as well as workplace and user factors that affect respirator performance and reliability. Selection of the appropriate respirator and cartridges is essential. EH&S makes these selections with the following OSHA requirements in consideration:

- All respirators issued to participating employees are NIOSH-approved.

- Potential toxic or irritating contaminant, its concentration and condition (e.g. dust, vapor, fume, etc);

- Type of work performed, such as but not limited to: welding, grinding, sanding, blasting, abrading, cutting, drilling, sawing or other mechanical operations that can affect respirator performance & reliability;

- Nature of chemical or material involved (e.g. corrosive, volatile, particulate, etc.) to which a worker is exposed that affects respirator performance & reliability;

- Limitations of the user and the equipment (e.g. protection factor, health conditions, adequate selection of respirator models and sizes for proper fit);

- Presence of other control measures (e.g. engineering and administrative controls, housekeeping, work practices);

- Percentage atmospheric oxygen in the area to be entered (e.g. oxygen-deficient, normal or oxygen-enriched atmospheres).

### Types of Respirators

1. Negative Pressure Air Purifying Respirators

   An air-purifying respirator (APR) is a full or half facemask with filters (N, P or R 95 and 100) that filters contaminated air as it is drawn in through cartridge filters. These filters are designed specifically for use in the presence of certain hazardous substances [e.g. high efficiency particulate air (HEPA) organic vapor, mercury vapor, acid gas, etc.]. It does not supply oxygen, therefore it shall only be used in atmospheres where the oxygen content ranges between 19.5% and 23.5%. APRs shall not be used in atmospheres immediately dangerous to life or health (IDLH).

2. Powered Air Purifying Respirator

   The positive pressure air-purifying respirator (PAPR) consists of a full facemask, filter
cartridge and battery pack. Please note that EH&S does not have PAPRs in stock available for use. Please contact EH&S during the design and develop stage of a project to determine if a PAPR is needed. The PAPR is not an air supplied unit and shall not be used in:

- Atmospheres with less than 19.5% oxygen;
- The presence of contaminants that are not filtered by an appropriate cartridge;
- Atmospheres immediately dangerous to life and health (IDLH).

3. Air Supplied Respirators

The air supplied respirator (ASR) supplies clean air from an independent source (e.g. air line). Please note that EH&S does not have ASRs in stock available for use.

4. Self Contained Breathing Apparatus (SCBA)

Self contained breathing apparatus supplies clean air from a portable independent source such as an air tank carried on ones back, shoulder or belt. It may be used in IDLH atmospheres, particularly where oxygen may be deficient or the atmosphere toxic.

Outside consultation, manufacturer's assistance, and other recognized authorities will be consulted if there is any doubt regarding proper selection of respirator.

Atmospheres immediately dangerous to life and health are those with oxygen content outside the range of 19.5% to 23.5% oxygen or that contain dangerous levels of toxic, radioactive or explosive contaminants. IDLH atmospheres shall be considered an emergency situation. The appropriate action is to evacuate the room, contact an emergency response organization (call 911) and the NIU Police non-emergency number 815-753-1212.

In the event of a catastrophic release of refrigerant gas (an oxygen displacer) the plan is to evacuate the room, contact 911 and the NIU Police non-emergency number, the Heating Plant leads and the Refrigeration foreman. The DeKalb Fire Department shall coordinate with witnesses (whoever made the emergency call), search for victims if any, ventilate the workspace and test the air to see when it is safe to reoccupy the space. The Heating Plant leads and Refrigeration foreman will determine when to send people back into that area.

EH&S recognizes the following types of respirators for use in university buildings: (Note: Choice of respirator type depends on oxygen levels and the protection factor required.)

<table>
<thead>
<tr>
<th>Respirator Type</th>
<th>Usage</th>
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</table>
| A N95 NIOSH-approved disposable filtering facepiece respirator. | • Animal facilities in the Psychology and Biology departments.  
• University healthcare staff for protection against the transmission of the tuberculosis bacteria (TB) and the Severe Acute Respiratory Syndrome (SARS) virus. |
An APR equipped with a filter approved by NIOSH such as a HEPA or chemical filter or combination thereof. Depending on the application the respirator may be half mask or full mask. Normal oxygen levels.

An APR equipped with any filter approved for particulates by NIOSH for contaminants consisting primarily of particles with mass median aerodynamic diameters (MMAD) of at least 2 micrometers, (i.e. dust). Normal oxygen levels.

A PAPR equipped with a filter approved by NIOSH as a HEPA or chemical filter or combination thereof. Normal oxygen levels.

For IDLH atmospheres, use a full facemask pressure demand self-contained breathing apparatus (SCBA) approved by NIOSH for a minimum service life of thirty minutes. Under stressful conditions service life may be substantially less than thirty minutes. Low oxygen levels or toxic atmospheres.

EH&S is not responsible for the inspection, maintenance and service of these SCBAs.

Medical Evaluations

A medical evaluation is an important element of an effective Respiratory Protection Program. It is necessary to determine whether an employee is medically qualified to use a given respirator. This evaluation is intended to prevent injuries, illnesses and in very rare cases death from the physiological burden imposed by respirator use.

At NIU, employees will not be assigned to tasks requiring the use of respirators unless it has been determined that they are physically able to use the respirator.

A physician or other professional licensed health care professional (PLHCP) will perform medical evaluations using a medical questionnaire found in Sections 1 and 2, Part A of Appendix C of 29 CFR 1910.134 for general respirator users and 29 CFR 1910.1001 Appendix D for asbestos workers.

All medical questionnaires and examinations are confidential and performed during the employee's normal working hours or at a time and place convenient to the employee. All employees are provided an opportunity to discuss the questionnaire and examination results with their PLHCP.
Before any initial examination or questionnaire is given, NIU will supply the PLHCP with the following information so that he/she can make the best recommendation concerning an employee's ability to safely use a respirator:

- Job tasks that required donning a respirator as outline in employee’s job description;
- Type and size of the respirator to be used by the employee;
- Duration and frequency of respirator use;
- Expected physical work effort;
- Additional protective clothing and equipment to be worn;
- Temperature and humidity extremes that may be encountered.

Once the PLHCP determines whether the employee has the ability to use or not use a respirator safely, he/she sends NIU’s Human Resources and EH&S department a written recommendation containing only the following information:

- Whether or not the employee is medically able to use the respirator;
- Limitations on respirator use related to the employee’s medical condition;
- Limitations on the workplace conditions in which the respirator will be used;
- The need, if any, for follow-up medical evaluations;
- A statement that the PLHCP has provided the employee with a copy of the PLHCP’s written recommendation.

Follow-up medical examination:

NIU will provide a follow-up medical examination if the employee provides a positive response on any of Questions 1 through 8 in the standardized medical questionnaire (see Section 2, Part A of Appendix C of 29 CFR 1910.134) or if the employee's initial medical examination demonstrates the need for a follow-up medical examination. The follow-up medical examination may include tests, consultations, or diagnostic procedures that the PLHCP deems necessary to make a final determination.

If the PLHCP finds a permanent medical condition that may place the employee's health at increased risk if a negative pressure respirator is used, NIU can remove the employee from duties requiring the use of a respirator for both the employee’s and the University’s protection. If a temporary medical condition may place the employee's health at increased risk if the negative pressure respirator is used and the PLHCP's medical evaluation finds that the employee can use such a PAPR, NIU may at its discretion provide the employee a PAPR for temporary use. If a subsequent medical evaluation finds that the employee is once again medically qualified to use a negative pressure respirator, then NIU will no longer provide a PAPR.

Additional medical examinations:

NIU will provide additional medical evaluations if:

- An employee reports to his/her supervisor and EH&S medical signs or symptoms that are related to the ability to use a respirator safely;
- A PLHCP, the employee’s supervisor, or EH&S informs the division director that the employee needs to be reevaluated;
- Information from the respiratory protection program, including observations made during
fit testing and program evaluation, indicates a need for employee reevaluation; or,

- A change occurs in workplace conditions (e.g., physical work effort, job duties, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on an employee.

**Voluntary Use**

If at any time an employee elects to voluntarily wear respiratory protection, they must complete a medical questionnaire for review by their PLHCP. If the PLHCP determines that the employee is medically qualified to don respiratory protection, EH&S is to be informed so it may provide the employee with a copy of Appendix D entitled, “Information for Employees Using Respirators When Not Required Under the Standard.” EH&S will consult with the employee to verify that the respirator does not present a health hazard to the user. **When an employee elects to voluntarily use an N95 filtering facepiece respirator for “nuisance” purposes, the medical evaluation is not required.**

Contact EH&S or Human Resources for a copy of your confidential medical evaluation or questionnaire.

**Fit Testing Procedures**

Respirators must fit properly to provide protection. If a tight seal is not maintained between the facemask and the employee's face, contaminated air will be drawn into the facemask and be inhaled by the employee. Fit testing seeks to protect the employee against inhaling contaminated ambient air and is one of the core provisions of our respirator program.

In general, respirator fit testing may be either qualitative or quantitative. Qualitative fit testing (QLFT) involves the introduction of a gas, vapor, or aerosol test agent into an area around the employee's breathing zone. If the user can detect the presence of the test agent through subjective means, such as odor, taste, or irritation, the respirator fit is inadequate.

In a quantitative respirator fit test (QNFT), the adequacy of respirator fit is assessed by measuring the amount of leakage into the respirator, either by generating a test aerosol as a test atmosphere, using ambient aerosol as a test agent, or using controlled negative pressure to measure the volumetric leak rate. Appropriate instrumentation is required to quantify respirator fit in a QNFT.

NIU ensures an employee is fit tested under the following circumstances:

- New employee or one that has changed jobs into one that requires respirator work;
- Whenever a different respirator facemask (size, style, model, or make) is used;
- At least annually;
  - Whenever the employee reports, or the PLHCP, supervisor, or EH&S makes visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight; and
  - When the employee, subsequently after passing a QLFT or QNFT, notifies the employee's supervisor, EH&S or the PLHCP that the fit of the respirator is unacceptable. That employee will be retested with a different model of respirator.
Employees must have a fit test of a type that follows the protocols and procedures contained in 29 CFR 1910.134 Appendix A. NIU’s workplace-specific fit testing procedure is a qualitative fit test using either irritant smoke or Bitrex solution for APRs. Other appropriate alternatives are available for those few individuals who may not be sensitive to irritant smoke or Bitrex solution. SCBA are to be fit tested using QNFT.

**Proper Use Procedures**

Once the respirator has been properly selected and fitted, its protection efficiency must be maintained by proper use in accordance with 29 CFR 1910.134(g). To ensure this, all employees using respirators shall be properly trained. The training shall be provided or presented by EH&S.

On completion of the training, the individual shall be able to:

- Understand the reasons for wearing respirators for particular situations.
- Comprehend the major elements of the Respirator Protection Program.
- Describe the type, applications, use and limitations of available respirators.
- Understand the available resources offering guidance on safe and proper use of respiratory protection devices.
- Clean, maintain and store his or her respirator.

Employees who require specialized equipment such as SCBA shall receive special training from the manufacturer’s representative or a trainer provided by EH&S.

NIU has used the following list to ensure that proper use procedures include coverage of OSHA requirements:

**Facemask Seal Protection**

Per OSHA regulations, **respirators shall not be worn** by employees who have:

- facial hair that comes between the sealing surface of the facemask and the face or that interferes with valve function
- any condition that interferes with the face-to-facemask seal or valve function.

Those who are not fit tested shall not be assigned tasks requiring use of a respirator until they can pass a respirator fit test.

The reason for the ban on fit testing those whose facial hair interferes with the seal is the rate of hair growth is unpredictable. The respirator that provides a good seal over fine or thin facial hair in the morning may fail to provide that seal only hours later. See Fig. 1.

Users must be sure to shave the seal area of the face at maximum the day prior to using a respirator. See Fig. 2.

It is permitted to shave a path in the facial hair so a good seal is made to the face. See Fig. 3.

Employers are **not required** to provide a more protective respirator like a hooded or helmeted
PAPR if workplace conditions do not warrant it. (For example, if a task requires use of a respirator with a protection factor of 10, the employer does not have to provide one with a protection factor of 25.)

Fig. 1. Amount of facial hair that will permit a proper seal

Fig. 2 Mask Seal Area
If an employee wears corrective glasses or goggles or other personal protective equipment, ensure that these are worn in a manner that does not interfere with the seal of the facemask to the face of the user.

For all tight-fitting respirators, employees shall perform a user seal check each time they put on the respirator using the procedures in 29 CFR 1910.134 Appendix B-1 (User Seal Check Procedures) or procedures recommended by the respirator manufacturer that can be demonstrated to be as effective as those in above-mentioned Appendix B-1.

**Continuing Respirator Effectiveness**

Appropriate surveillance must be maintained of work area conditions and degree of employee exposure or stress. Employees using respirators should leave the work area to attend to any of the following situations:

- To wash their faces and respirator facemasks 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 mask.
- To replace the respirator or the filter, cartridge, canister elements or air tank.

**Procedures for IDLH Atmospheres**

As stated above, an IDLH atmosphere is an emergency situation. In most cases emergency services should be contacted immediately (Call 911). In the case of the Engineering clean room, specially trained NIU personnel may don SCBAs in an effort to shut down the source of the IDLH atmosphere, at their supervisor’s discretion. It is strongly advised they only enter the
affected work area when emergency responders equipped with SCBAs and technical rescue gear are present to effect a rescue should it be necessary.

**Procedures for Interior Structural Firefighting**

NIU personnel are not to fight fires but are to evacuate the area and contact emergency services immediately.

**Maintenance and Care Procedures**

In order to ensure continued protection, proper maintenance of respirators and related equipment is essential. Disregarding proper maintenance will result in a defective respirator and unnecessary exposure.

**Cleaning and Disinfecting**

NIU provides each respirator user with a respirator that is clean, sanitary, and in good working order. The users are responsible for the respirators’ proper cleaning and maintenance. Respirators are cleaned and disinfected at the following intervals:

<table>
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<tr>
<th>Respirator:</th>
<th>Cleaned and disinfected at the following interval:</th>
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<tr>
<td>Issued for the exclusive use of an employee</td>
<td>As often as necessary to be maintained in a sanitary condition and after each use.</td>
</tr>
<tr>
<td>Issued to more than one employee</td>
<td>Before being worn by different individuals and after each use</td>
</tr>
<tr>
<td>Maintained for emergency use</td>
<td>After each use</td>
</tr>
<tr>
<td>Used in fit testing and training</td>
<td>After each use</td>
</tr>
</tbody>
</table>

**Storage**

Respirators must be stored in a clean plastic bag to ensure that the equipment is protected and not subject to environmental conditions that may cause deterioration. Users are responsible to see that respirators are stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals. Respirators are to be packed or stored carefully to prevent deformation of the facemask and exhalation valve.

**Inspection**

Users are responsible for inspecting their respirators. The frequency of inspection is related to the frequency of use.

<table>
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<tr>
<th>Respirator type:</th>
<th>Inspected at the following frequencies:</th>
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<tr>
<td>All types used in routine situations</td>
<td>Before each use and during cleaning.</td>
</tr>
<tr>
<td>SCBAs maintained for use in emergency situations</td>
<td>Checked for proper function before and after each use. Inspected monthly, preferably by user.</td>
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</table>
Respirator inspections include evaluation of:

- Respirator function, tightness of connections, and the condition of the various parts including the facemask, head straps, valves, associated covers and gaskets as well as cartridges, canisters or filters;
- Pliability and signs of deterioration;
- Self-contained breathing apparatus regulator and warning devices as well as the components listed above. The air and oxygen cylinders shall be maintained in a fully charged state and recharged when the pressure falls to 90% of the manufacturer’s recommended pressure level. Metal air bottles shall be hydrostatically tested every 5 years.

Disposal or Repair

Respirators that fail an inspection or are otherwise found to be defective are to be tagged and removed from service. The decision to discard or repair respirators is to be made only by persons appropriately trained to do so. HEPA cartridges contaminated with asbestos must be disposed of as asbestos waste. Respirators, once decontaminated, may be discarded as general waste. Medical type respirators that cannot be decontaminated should be disposed of as medical waste.

Only NIOSH-approved parts by the respirator’s manufacturer are to be used in repairs. Repairs must be made according to the manufacturer’s recommendations and specifications for that type of respirator.

Air Quality Procedures

When SCBAs are being used to protect employees it is essential to ensure that the air being breathed is of sufficiently high quality. Compressed breathing air must meet at least the requirements for Grade D breathing air described in ANSI/Compressed Gas Association Commodity Specification for Air, G-7.1-1989, to include:

- Oxygen content of 19.5-23.5%;
- Hydrocarbon (condensed) content of 5 milligrams per cubic meter of air or less;
- Carbon monoxide (CO) content of 10 parts per million (ppm) or less;
- Carbon dioxide content of 1,000 ppm or less; and
- Lack of noticeable odor.

Cylinders Used to Supply Breathing Air to Respirators:

- Cylinders must be tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR 173 and 178).
- Cylinders of purchased breathing air must have a certificate of analysis from the supplier that the breathing air meets the requirements for Grade D breathing air.
- The moisture content in the cylinder must not exceed a dew point of -50 deg. F (-45.6 deg. C) at 1 atmosphere pressure.

Metal air bottles must be hydrostatically tested every 5 years. This inspection and testing is the responsibility of the department that owns the equipment.
Filters, Cartridges, and Canisters:

Filters, cartridges and canisters used in the workplace are labeled and color-coded with the NIOSH approval label. The label is not to be removed and must be legible.

Training

The most thorough respiratory protection program will only be effective if employees wear their respirators and do so properly. Employee training is an important part of the respiratory protection program and is essential for correct respirator use.

NIU’s training program, provided by EH&S, is two-fold, covering both the:

- Respiratory hazards to which our employees are potentially exposed during routine and emergency situations, and
- Proper use of respirators, including donning techniques, limitations on their use, and their maintenance.

Both training parts are provided prior to requiring an employee to use a respirator in the workplace. However, if an employee has received training within 12 months addressing the seven basic elements of respiratory protection (see "Seven Basic Elements" below) and NIU and the employee can demonstrate that he/she has knowledge of those elements, then that employee is not required to repeat such initial training.

NIU does require all respirator-using employees to be retrained when the following situations occur:

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

Seven Basic Elements:

NIU employees involved in tasks that may require a respirator are trained sufficiently to be able to demonstrate knowledge of these seven elements:

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


**Program Evaluation**

It is inherent in respirator use that problems with protection, irritation, breathing resistance, comfort, and other respirator-related factors occasionally arise in most respirator protection programs. Although it is not possible to eliminate all problems associated with respirator use, NIU will try to eliminate as many problems as possible to improve respiratory protection and encourage employee acceptance and safe use of respirators. The EH&S Department will thoroughly evaluate and, as necessary, revise the Respiratory Protection Program in order to eliminate problems effectively.

At NIU, program evaluation involves the following:

- Conducting evaluations of the workplace to ensure that the provisions of the current written program are being effectively implemented and that it continues to be effective;

- Conducting medical clearance and annual follow-up evaluation of all employees required to use respirators;

- Consulting employees who use respirators to assess their views on program effectiveness and to identify any problems. Problems that are identified during this assessment will be addressed.
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<th>Appendix 1</th>
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<td>Qualitative Fit Testing Form</td>
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Appendix 1

Record of Respirator Training
Respirator Qualitative Fit Testing

Employee’s Name: ___________________________ Date: ______________

☐ Initial Fit Test  ☐ Annual Fit Test Recheck

I understand that the fit test will involve:
1. Donning a respirator, which may make my breathing more difficult.
2. Being exposed to a test substance if the respirator does not fit properly or is faulty.
To my knowledge I have no cardiovascular conditions that would put me in danger. I am not aware of any pulmonary conditions or allergies to irritant smoke (stannic oxychloride) or banana oil.

The following have been discussed with me:
1. The nature of the respiratory hazard.
2. Why engineering controls cannot be used in place of respiratory equipment.
3. The reasons why I must wear the respirator, and the disciplinary actions that will be taken for intentional incorrect wear.
4. What type of respirator is chosen for particular hazards.
5. The limitations and capabilities of each respirator.
6. Purpose of the medical evaluation to determine authorization for respirator use.
7. The conditions that prevent a good face seal.
8. The necessity of wearing the respirator as instructed, without modification.
9. Recognizing and handling emergency situations when wearing a respirator.

I have been instructed in the following:
1. How to wear a respirator.
2. How to adjust the respirator.
3. How to determine if a proper fit (pressure fit-test), to fit-check the respirator each time I put it on, and to have it refitted every year or more often as necessary.
4. How to inspect the respirator.
5. How to clean the respirator.
6. How to store the respirator.

I have received training in and understand the above items concerning respirator use, care and inspection. I consent to submit to this fit test at my own risk and acknowledge fit testing of the respirator(s) listed.

<table>
<thead>
<tr>
<th>RESPIRATOR BRAND</th>
<th>MODEL</th>
<th>SIZE</th>
<th>PASS/FAIL</th>
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Employee Signature

_________________________________________________
Trainer / Fitter
Appendix 2

Qualitative Fit Testing Form
Respiratory Protection Qualitative Fit Testing Form

Employee Name: _______________________________ Date:__________

Northern Illinois University  Location:  DeKalb  Fit Test Method:

Dept: ________________________________

Respirator Make: ___________________________ Other _________

Visual Inspection

Positive Pressure Leak Test: Pass □ Fail □ (Check one)
Negative Pressure Leak Test: Pass □ Fail □ (Check one)
Facial Hair in Seal Path: Pass □ Fail □ (Check one)

Qualitative Fit Test

Move Head From Side-to-side: Pass □ Fail □ (Check one)
Move Head Up-and-Down: Pass □ Fail □ (Check one)
Recite Passage: Pass □ Fail □ (Check one)
Remain Still: Pass □ Fail □ (Check one)
Breathe Deeply: Pass □ Fail □ (Check one)
Breathe Normally: Pass □ Fail □ (Check one)

Rainbow Passage

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

Signatures
Employee: ______________________________________
Fit Test By: ______________________________________
Appendix 3

Respirator Training Attendance Form
Respirator Training Class

By signing below, you are certifying that you have received information regarding Northern Illinois University’s respiratory protection program. Your signature indicates that you have had any questions answered and understand the information presented.

Date:
Instructor:

<table>
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<tr>
<th>Name (Print)</th>
<th>Signature</th>
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Appendix 4
Medical Questionnaire from 29 CFR 1910.134 App. C
Appendix C to Sec. 1910.134: OSHA Respirator Medical Evaluation Questionnaire (Mandatory)

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:

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?
a. Seizures: 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
   d. 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: 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; 76 FR 33607, June 8, 2011; 77 FR 46949, Aug. 7, 2012]

Next Standard (1910.134 App D)

Regulations (Standards - 29 CFR) - Table of Contents
This mandatory appendix contains the medical questionnaires that must be administered to all employees who are exposed to asbestos above permissible exposure limit, and who will therefore be included in their employer's medical surveillance program. Part 1 of the appendix contains the Initial Medical Questionnaire, which must be obtained for all new hires who will be covered by the medical surveillance requirements. Part 2 includes the abbreviated Periodical Medical Questionnaire, which must be administered to all employees who are provided periodic medical examinations under the medical surveillance provisions of the standard.
Part 1

INITIAL MEDICAL QUESTIONNAIRE

1. NAME ________________________________________________________________

2. SOCIAL SECURITY NUMBER # ____________________________________________

3. CLOCK NUMBER ________________________________________________________

4. PRESENT OCCUPATION ___________________________________________________

5. PLANT _________________________________________________________________

6. ADDRESS _____________________________________________________________

7. ___________________________ ________________________
   (Zip Code)

8. TELEPHONE NUMBER ____________________________________________________

9. INTERVIEWER _________________________________________________________

10. DATE _________________________________________________________________

11. Date of Birth __________________________________________________________

   Month    Day    Year
12. Place of Birth ________________________________________________

13. Sex
   1. Male ___
   2. Female ___

14. What is your marital status?
   2. Married ___  Divorced ___
   3. Widowed ___

15. Race
   1. White ___  4. Hispanic ___
   2. Black ___  5. Indian ___
   3. Asian ___  6. Other ___

16. What is the highest grade completed in school? _________________
   (For example 12 years is completion of high school)

OCCUPATIONAL HISTORY

17A. Have you ever worked full time (30 hours per week or more) for 6 months or more?
   1. Yes ___  2. No ___

IF YES TO 17A:
B. Have you ever worked for a year or more in any dusty job? 1. Yes ___ 2. No ___ 3. Does Not Apply ___

Specify job/industry ________________ Total Years Worked __________


C. Have you ever been exposed to gas or chemical fumes in your work? 1. Yes ___ 2. No ___

Specify job/industry ______________________ Total Years Worked ______________


D. What has been your usual occupation or job -- the one you have worked at the longest?

1. Job occupation ________________________________________________

2. Number of years employed in this occupation _____________

3. Position/job title ____________________________________________

4. Business, field or industry ____________________________________

(Record on lines the years in which you have worked in any of these industries, e.g. 1960-1969)

Have you ever worked: YES NO

E. In a mine? ......................... _____  _____
F. In a quarry? .......................          _____      _____

G. In a foundry? ......................          _____      _____

H. In a pottery? ......................          _____      _____

I. In a cotton, flax or hemp mill? ....          _____      _____

J. With asbestos? .....................          _____      _____

18. PAST MEDICAL HISTORY

YES        NO

A. Do you consider yourself to be in good health?          _____      _____

If "NO" state reason __________________________________________

B. Have you any defect of vision? ...................          _____      _____

If "YES" state nature of defect ______________________________

C. Have you any hearing defect? ...................          _____      _____

If "YES" state nature of defect ______________________________

D. Are you suffering from or have you ever suffered from:

YES        NO

a. Epilepsy (or fits, seizures, convulsions)?          _____      _____
b. Rheumatic fever? _____ _____

c. Kidney disease? _____ _____

d. Bladder disease? _____ _____

e. Diabetes? _____ _____

f. Jaundice? _____ _____

19. CHEST COLDS AND CHEST ILLNESSES

19A. If you get a cold, does it "usually" go to your chest? (Usually means more than 1/2 the time)

1. Yes ___ 2. No ___ 3. Don't get colds ___

20A. During the past 3 years, have you had any chest illnesses that have kept you off work, indoors at home, or in bed?

1. Yes ___ 2. No ___

IF YES TO 20A:

B. Did you produce phlegm with any of these chest illnesses?

1. Yes ___ 2. No ___ 3. Does Not Apply ___

C. In the last 3 years, how many such illnesses with (increased) phlegm did you have which lasted a week or more?

Number of illnesses ___ No such illnesses ___

21. Did you have any lung trouble before the age of 16?

1. Yes ___ 2. No ___
22. Have you ever had any of the following?

1A. Attacks of bronchitis?  
   1. Yes ___  2. No ___   

   IF YES TO 1A:  
   B. Was it confirmed by a doctor?  
      1. Yes ___  2. No ___  
      3. Does Not Apply ___  
   C. At what age was your first attack?  
      Age in Years ___  
      Does Not Apply ___

2A. Pneumonia (include bronchopneumonia)?  
   1. Yes ___  2. No ___  

   IF YES TO 2A:  
   B. Was it confirmed by a doctor?  
      1. Yes ___  2. No ___  
      3. Does Not Apply ___  
   C. At what age did you first have it?  
      Age in Years ___  
      Does Not Apply ___

3A. Hay Fever?  
   1. Yes ___  2. No ___  

   IF YES TO 3A:  
   B. Was it confirmed by a doctor?  
      1. Yes ___  2. No ___  
      3. Does Not Apply ___  
   C. At what age did it start?  
      Age in Years ___  
      Does Not Apply ___
23A. Have you ever had chronic bronchitis?  
1. Yes ___  2. No ___

IF YES TO 23A:
B. Do you still have it?  
1. Yes ___  2. No ___
3. Does Not Apply ___

C. Was it confirmed by a doctor?  
1. Yes ___  2. No ___
3. Does Not Apply ___

D. At what age did it start?  
Age in Years ___
Does Not Apply ___

24A. Have you ever had emphysema?  
1. Yes ___  2. No ___

IF YES TO 24A:
B. Do you still have it?  
1. Yes ___  2. No ___
3. Does Not Apply ___

C. Was it confirmed by a doctor?  
1. Yes ___  2. No ___
3. Does Not Apply ___

D. At what age did it start?  
Age in Years ___
Does Not Apply ___

25A. Have you ever had asthma?  
1. Yes ___  2. No ___

IF YES TO 25A:
B. Do you still have it?  
1. Yes ___  2. No ___
C. Was it confirmed by a doctor?  
1. Yes ___  2. No ___  
3. Does Not Apply ___

D. At what age did it start? 
Age in Years ___  
Does Not Apply ___

E. If you no longer have it, at what age did it stop? 
Age stopped ___  
Does Not Apply ___

26. Have you ever had:

A. Any other chest illness?  
1. Yes ___  2. No ___

If yes, please specify ____________________________________________

B. Any chest operations?  
1. Yes ___  2. No ___

If yes, please specify ____________________________________________

C. Any chest injuries?  
1. Yes ___  2. No ___

If yes, please specify ____________________________________________

27A. Has a doctor ever told you that you had heart trouble?  
1. Yes ___  2. No ___

IF YES TO 27A:

B. Have you ever had treatment for heart trouble in the past 10 years?  
1. Yes ___  2. No ___  
3. Does Not Apply ___
28A. Has a doctor told you that you had high blood pressure?

1. Yes ___  2. No ___

IF YES TO 28A:

B. Have you had any treatment for high blood pressure (hypertension) in the past 10 years?

1. Yes ___  2. No ___
3. Does Not Apply ___

29. When did you last have your chest X-rayed?

(Year) ___ ___ ___ ___

30. Where did you last have your chest X-rayed (if known)?

_____________________________________________________________________

What was the outcome? _________________________ ________________

FAMILY HISTORY

31. Were either of your natural parents ever told by a doctor that they had a chronic lung condition such as:

FATHER                     MOTHER
   know                     know

A. Chronic Bronchitis?

___ ___ ___ ___ ___ ___ ___ ___
B. Emphysema? ___ ___ ___ ___ ___ ___ ___

C. Asthma? ___ ___ ___ ___ ___ ___ ___

D. Lung cancer? ___ ___ ___ ___ ___ ___ ___

E. Other chest conditions? ___ ___ ___ ___ ___ ___ ___

F. Is parent currently alive? ___ ___ ___ ___ ___ ___ ___

G. Please Specify ___ Age if Living ___ Age if Living ___ Age at Death ___ Age at Death ___ Don't Know ___ Don't Know

H. Please specify cause of death __________________________ __________________________

COUGH

32A. Do you usually have a cough? (Count a cough with first smoke or on first going out of doors. Exclude clearing of throat.)

(If no, skip to question 32C.)

1. Yes ___ 2. No ___

B. Do you usually cough as much as 4 to 6 times a day 4 or more days out of the week?

1. Yes ___ 2. No ___

C. Do you usually cough at all on getting up or first thing in the morning?

1. Yes ___ 2. No ___
D. Do you usually cough at all during the rest of the day or at night?

1. Yes ___  2. No ___

IF YES TO ANY OF ABOVE (32A, B, C, OR D), ANSWER THE FOLLOWING. IF NO TO ALL, CHECK "DOES NOT APPLY" AND SKIP TO NEXT PAGE

E. Do you usually cough like this on most days for 3 consecutive months or more during the year?

1. Yes ___  2. No ___
3. Does not apply ___

F. For how many years have you had the cough?        Number of years ___

Does not apply ___

33A. Do you usually bring up phlegm from your chest?

(Count phlegm with the first smoke or on first going out of doors. Exclude phlegm from the nose. Count swallowed phlegm.) (If no, skip to 33C)

1. Yes ___  2. No ___

B. Do you usually bring up phlegm like this as much as twice a day 4 or more days out of the week?

1. Yes ___  2. No ___

C. Do you usually bring up phlegm at all on getting up or first thing in the morning?

1. Yes ___  2. No ___

D. Do you usually bring up phlegm at all on during the rest of the day or at night?

1. Yes ___  2. No ___
IF YES TO ANY OF THE ABOVE (33A, B, C, OR D), ANSWER THE FOLLOWING:

IF NO TO ALL, CHECK "DOES NOT APPLY" AND SKIP TO 34A

E. Do you bring up phlegm like this on most days for 3 consecutive months or more during the year?

    1. Yes ___  2. No ___  3. Does not apply ___

F. For how many years have you had trouble with phlegm?

    Number of years ___  
    Does not apply ___

EPISODES OF COUGH AND PHLEGM

34A. Have you had periods or episodes of (increased*) cough and phlegm lasting for 3 weeks or more each year?

    *(For persons who usually have cough and/or phlegm)

    1. Yes ___  2. No ___

    IF YES TO 34A

B. For how long have you had at least 1 such episode per year?

    Number of years ___  
    Does not apply ___

WHEEZING

35A. Does your chest ever sound wheezy or whistling

    1. When you have a cold?  1. Yes ___  2. No ___
2. Occasionally apart from colds?  1. Yes  2. No

3. Most days or nights?  1. Yes  2. No

IF YES TO 1, 2, or 3 in 35A

B. For how many years has this been present?

Number of years ___

Does not apply ___

36A. Have you ever had an attack of wheezing that has made you feel short of breath?

1. Yes  2. No

IF YES TO 36A

B. How old were you when you had your first such attack?

Age in years ___

Does not apply ___

C. Have you had 2 or more such episodes?

1. Yes  2. No  3. Does not apply ___

D. Have you ever required medicine or treatment for the(se) attack(s)?

1. Yes  2. No  3. Does not apply ___
BREATHLESSNESS

37. If disabled from walking by any condition other than heart or lung disease, please describe and proceed to question 39A.
Nature of condition(s) ______________________________________________
_____________________________________________________________

38A. Are you troubled by shortness of breath when hurrying on the level or walking up a slight hill?

1. Yes ___  2. No ___

IF YES TO 38A

B. Do you have to walk slower than people of your age on the level because of breathlessness?

1. Yes ___  2. No ___
3. Does not apply ___

C. Do you ever have to stop for breath when walking at your own pace on the level?

1. Yes ___  2. No ___
3. Does not apply ___

D. Do you ever have to stop for breath after walking about 100 yards (or after a few minutes) on the level?

1. Yes ___  2. No ___
3. Does not apply ___

E. Are you too breathless to leave the house or breathless on dressing or climbing one flight of stairs?

1. Yes ___  2. No ___
3. Does not apply ___
TOBACCO SMOKING

39A. Have you ever smoked cigarettes? (No means less than 20 packs of cigarettes or 12 oz. of tobacco in a lifetime or less than 1 cigarette a day for 1 year.)

1. Yes ___ 2. No ___

IF YES TO 39A

B. Do you now smoke cigarettes (as of one month ago)

1. Yes ___ 2. No ___
3. Does not apply ___

C. How old were you when you first started regular cigarette smoking?

Age in years ___
Does not apply ___

D. If you have stopped smoking cigarettes completely, how old were you when you stopped?

Age stopped ___
Check if still smoking ___
Does not apply ___

E. How many cigarettes do you smoke per day now?

Cigarettes per day ___
Does not apply ___

F. On the average of the entire time you smoked, how many cigarettes did you smoke per day?

Cigarettes per day ___
Does not apply ___
G. Do or did you inhale the cigarette smoke?

1. Does not apply ___
2. Not at all ___
3. Slightly ___
4. Moderately ___
5. Deeply ___

40A. Have you ever smoked a pipe regularly?

(Yes means more than 12 oz. of tobacco in a lifetime.)

1. Yes ___  2. No ___

IF YES TO 40A:

FOR PERSONS WHO HAVE EVER SMOKED A PIPE

B. 1. How old were you when you started to smoke a pipe regularly?

   Age ___

2. If you have stopped smoking a pipe completely, how old were you when you stopped?

   Age stopped ___
   Check if still smoking pipe ___
   Does not apply ___

C. On the average over the entire time you smoked a pipe, how much pipe tobacco did you smoke per week?

   ___ oz. per week
   (a standard pouch of tobacco contains 1 1/2 oz.)
   ___ Does not apply
D. How much pipe tobacco are you smoking now?

  oz. per week ___

  Not currently smoking a pipe ___

E. Do you or did you inhale the pipe smoke?

  1. Never smoked ___
  2. Not at all ___
  3. Slightly ___
  4. Moderately ___
  5. Deeply ___

41A. Have you ever smoked cigars regularly?

  1. Yes ___  2. No ___

  (Yes means more than 1 cigar a week for a year)

IF YES TO 41A

FOR PERSONS WHO HAVE EVER SMOKED A CIGARS

B. 1. How old were you when you started smoking cigars regularly?

  Age ___

  2. If you have stopped smoking cigars completely, how old were you when you stopped.

  Age stopped ___

  Check if still smoking cigars ___

  Does not apply ___

C. On the average over the entire time you smoked cigars, how many cigars did you smoke per week?

  Cigars per week ___

  Does not apply ___
Part 1

D. How many cigars are you smoking per week now? Cigars per week ___
Check if not smoking cigars currently ___

E. Do or did you inhale the cigar smoke? 1. Never smoked ___
2. Not at all ___
3. Slightly ___
4. Moderately ___
5. Deeply ___

Signature ______________________________ Date _____________________

Part 2

PERIODIC MEDICAL QUESTIONNAIRE

1. NAME _______________________________________________________________

2. SOCIAL SECURITY # ___ ___ ___ ___ ___ ___ ___ ___ ___

3. CLOCK NUMBER ___ ___ ___ ___ ___ ___ ___ ___

4. PRESENT OCCUPATION ________________________________________________

5. PLANT _____________________________________________________________

6. ADDRESS __________________________________________________________

7. _____________________________________________________________________  (Zip Code)
8. TELEPHONE NUMBER ____________________________________________

9. INTERVIEWER ________________________________________________

10. DATE ___________________________ ___ ___ ___ ___ ___ ___ ___ ___

    2. Married ___ Divorced ___
    3. Widowed ___

12. OCCUPATIONAL HISTORY

12A. In the past year, did you work 1. Yes ___ 2. No ___
    full time (30 hours per week
    or more) for 6 months or more?

    IF YES TO 12A:

12B. In the past year, did you work 1. Yes ___ 2. No ___
    in a dusty job? 3. Does not Apply ___


12D. In the past year, were you 1. Yes ___ 2. No ___
    exposed to gas or chemical


12F. In the past year,
    what was your: 1. Job/occupation? _________________________
    2. Position/job title? _________________________
13. RECENT MEDICAL HISTORY

13A. Do you consider yourself to be in good health?  
Yes ___  No ___

If NO, state reason ________________________________

13B. In the past year, have you developed:  

<table>
<thead>
<tr>
<th>Disease</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Epilepsy?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Rheumatic fever?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Kidney disease?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Bladder disease?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Diabetes?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Jaundice?</td>
<td>___</td>
<td>___</td>
</tr>
<tr>
<td>Cancer?</td>
<td>___</td>
<td>___</td>
</tr>
</tbody>
</table>

14. CHEST Colds AND CHEST ILLNESSES

14A. If you get a cold, does it "usually" go to your chest?  
(usually means more than 1/2 the time)

1. Yes ___  2. No ___  3. Don't get colds ___

15A. During the past year, have you had any chest illnesses that have kept you off work, indoors at home, or in bed?  

1. Yes ___  2. No ___  3. Does Not Apply ___

IF YES TO 15A:
15C. In the past year, how many such illnesses with (increased) phlegm did you have which lasted a week or more?

16. RESPIRATORY SYSTEM

In the past year have you had:

<table>
<thead>
<tr>
<th>Yes or No</th>
<th>Further Comment on Positive Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Asthma</td>
<td></td>
</tr>
<tr>
<td>Bronchitis</td>
<td></td>
</tr>
<tr>
<td>Hay Fever</td>
<td></td>
</tr>
<tr>
<td>Other Allergies</td>
<td></td>
</tr>
</tbody>
</table>

Yes or No  Further Comment on Positive Answers

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
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</tr>
</tbody>
</table>

Pneumonia  
Tuberculosis  
Chest Surgery  
Other Lung Problems  
Heart Disease
<table>
<thead>
<tr>
<th>Question</th>
<th>Yes or No</th>
<th>Further Comment on Positive Answers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Frequent colds</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Chronic cough</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Shortness of breath when walking or climbing one flight or stairs</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Do you:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wheeze</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cough up phlegm</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Smoke cigarettes</td>
<td></td>
<td>Packs per day ____ How many years ___</td>
</tr>
</tbody>
</table>

Date __________________    Signature ____________________________________

[57 FR 24330, June 8, 1992; 59 FR 40964, Aug. 10, 1994]
Appendix 5

Mandatory Information for Employees Using Respirators When Not Required Under the Standard (Appendix D to Sec. 1910.134)
Mandatory Information for Employees Using Respirators When Not Required Under the Standard (Appendix D to Sec. 1910.134)

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