



The University Of

T A M P A

Respirator Protection Policy

*Effective January
2015*

Revision 1.0

RECORD OF AMENDMENTS

| Date | Section | Amendment | Initial |
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| 01/16/17 | 4 | Added Physician/Licensed Health Care Provider | LAKJ |

When using a paper copy of this document, verify that it is the same revision level as the on-line version.

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**Respirator Protection
Program Policy**
Effective January 2015

- 9.1 Las preguntas del 10 al 15 deben ser contestadas por los empleados seleccionados para usar una máscara con cartucho químico o aparato respiratorio autónomo (SCBA). Los empleados que usan otro tipo de respirador no tienen que contestar estas preguntas. 34
- 9.2 Parte B - Las siguientes preguntas pueden ser agregadas al cuestionario a discrecion del profesional de sanidad con licencia autorizado por el estado. 35

1. PURPOSE AND SCOPE

The elements of a written respiratory protections program as established in Title 29, Code of Federal Regulations, Section 1910, Part 139, are designed to ensure that respirators used by faculty and staff at The University of Tampa provide effective protection and minimize occupational exposure to airborne contaminants. Respirators will only be considered as a way to control exposure after the Chemical Hygiene & Biological Safety Officer [CHBO] has first considered engineering and administrative controls such as ventilation, enclosing the process, substitution of less hazardous products, rescheduling of work procedures, etc. to restrict exposure.

Occasionally, a single strap disposable "dust mask" respirator (also referred to as comfort masks) may be used in non-hazardous atmospheres without implementing the University's Respiratory Protection Program requirements. The single strap disposal dusk mask is not NIOSH/Mine Safety and Health Administration [MSHA] approved, and cannot be confused with the double strap disposable "dust mask" respirators which are often NIOSH/MSHA approved.

1.1 REGULATORY STANDARD

Guidelines for management of biomedical waste are found in Chapter 64E-16, Florida Administrative Code (F.A.C.), and in section 381.0098, Florida Statutes.

RELATED DOCUMENTS

OSHA CODE OF FEDERAL REGULATIONS

| Number | Title |
|--------|-------|
|--------|-------|

| | |
|-----------------|------------------------|
| 29 CFR 1910.139 | Respiratory Protection |
|-----------------|------------------------|

ANSI/ASSE Standard Z88.2-2015 – Practice for Respiratory Protection

1.2 DEFINITIONS

Air-Purifying Respirator

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

ACGIH

American Conference of Governmental Industrial Hygienist.

Atmosphere Supplying

A respirator that supplies the respirator user with breathing air from a source independent of the

Respirator

ambient atmosphere, and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

Canister or Cartridge

A container with a filter, sorbent, or catalyst, or combination of these items, which removes specific contaminants from the air passed through the container.

Contaminant

A harmful, irritating, or nuisance material that is foreign to the normal atmosphere.

Emergency Situation

Any occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment that may or does result in an uncontrolled significant release of an airborne contaminant.

Employee Exposure

Exposure to a concentration of an airborne contaminant that would occur if the employee were not using respiratory protection.

End of Service Life Indicator (ESLI)

A system that warns the respirator user of the approach of the end of adequate respiratory protection, for example, that the sorbent is approaching saturation or is no longer effective.

Filter or Air Purifying Element

A component used in respirators to remove solid or liquid aerosols from the inspired air.

Filtering Face piece (Dust Mask)

A negative pressure particulate respirator with a filter as an integral part of the face piece or with the entire face piece composed of the filtering medium.

Fit Test

The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. (See also Qualitative fit test QLFT and Quantitative fit test QNFT.)

Immediately Dangerous to Life or Health (IDLH)

An atmosphere that poses an immediate threat to life, would cause irreversible adverse health effects, or would impair an individual's ability to

NIOSH

escape from a dangerous atmosphere.

National Institute of Occupational Safety and Health

Oxygen Deficient Atmosphere

An atmosphere with an oxygen content below 19.5% by volume.

PEL

Permissible Exposure Limit is an airborne concentration of substance that all workers can be exposed to without adverse health effects (OSHA enforced concentration).

Physician or Other Licensed Health Care Professional (PLHCP)

An individual whose legally permitted scope of practice (i.e., license, registration, or certification) allows him or her to independently provide, or be delegated the responsibility to provide health care services.

Qualitative Fit Test (QLFT)

A pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

Quantitative Fit Test (QNFT)

An assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Self-Contained Breathing Apparatus (SCBA)

An atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

Service Life

The period of time that a respirator, filter or sorbent, or other respiratory equipment provides adequate protection to the wearer.

Supplied-Air Respirator (SAR)

An atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

Tight-Fitting Face piece

A respiratory inlet covering that forms a complete seal with the face.

TLV

Threshold Limit Value is an airborne concentration of a substance that all workers can be exposed to without adverse health effects.

User Seal Check

An action conducted by the respirator user to determine if the respirator is properly seated to the face.

2. PROGRAM REQUIREMENTS

The CHBO will be responsible for administering the respiratory protection program at the University. Supervisory personnel shall monitor and ensure that all employees abide by the respiratory protection program. Specifically, supervisory personnel will frequently inspect to ensure that the:

- ❑ Assessing the type and amount of exposure
- ❑ Ensuring that the correct respirators are being used using best available industry information including, Current ANSI standard Z88.2-1992 Respiratory Protection Standard, and NIOSH 42 CFR part 84 & 1987 NIOSH Respiratory Decision Logic.;
- ❑ Respirator users have been properly trained;
- ❑ Respirators are being worn properly;
- ❑ Respirators are in good working condition;
- ❑ Respirators are repaired when necessary; and
- ❑ Respirators are regularly cleaned and disinfected.

Faculty and staff shall use this respiratory protection program in accordance with all instructions and training received. All employees shall guard against damage to the respirators, and shall report any malfunction of a respirator to the CHBO or immediate supervisor.

2.1 SELECT APPROPRIATE RESPIRATOR

The University shall select and provide an appropriate respirator based on the respiratory hazards to which the employee is exposed, site conditions, and user factors that affect respirator performance and reliability. The University will identify specific job tasks that

require a respirator and shall issue each affected employee, a NIOSH-certified half-face and/or full-face air-purifying respirator. The respirator type and model will be subject to employee comfort and acceptable fit standards. Such respiratory equipment shall be used when it is necessary to protect the health of employees whenever feasible engineering and work practice controls are not available, or are not sufficient to protect employee health, or have not yet been instituted, and in hazardous waste emergency operations.

At this time, atmosphere-supplying respirators will not be issued on campus. Instead, the University will subcontract out these activities to a contractor with a proven effective Respiratory Protection Program that includes atmosphere-supplying respirators in highly hazardous atmospheres (i.e. IDLH environments). Laboratory Specific Standard Operating Procedures may also provide a provision for a NIOSH-approved escape-only respirator for emergency use in potential IDLH situations or oxygen deficient atmospheres.

2.2 IDENTIFY TYPES OF HAZARDOUS MATERIALS AND RESPIRATOR NEEDS

The following procedure refers to the use of half-mask or full-face dual cartridge respirators. Disposable dust masks may only be used for non-toxic or low toxic particulate materials; they must have two straps and a NIOSH-approval TC number on the mask or strap. The duration of the protection provided by atmosphere supplying respirators is limited by their air supply.

The primary factors affecting the consumption rate of the air supply are respiration rate and breathing volume. The duration of the protection provided by Air Purifying Respirators is limited by their reactive capacity or the flow restriction created by the particulate burden in their pore spaces. The factors that affect length of time the cartridge is protective are:

- ❑ respiration rate;
- ❑ lung volume;
- ❑ concentration of the contaminant; and
- ❑ Humidity.

An air-purifying respirator using cartridges may only be used for protection against materials that have adequate warning properties (odor, taste, or irritation); Not for situations that are immediately dangerous to life and health (IDLH). Highly toxic materials may produce injury or be fatal in very small doses (i.e., LD50 or LC50). IDLH conditions include a low oxygen environment (<19.5%).

Possible airborne hazards for University faculty and staff may include:

- ❑ Microbiological or Biohazardous Procedures
- ❑ Spray Painting Activities

- ❑ Wood Working
- ❑ Solvents from Paint and Degreasing Operations
- ❑ Ceramics Studio

Airborne concentrations are evaluated from existing site laboratory analytical data, organic vapor analysis [OVA] measurements, combustible gas indicators, and SDSs. Existing data is compared to Permissible exposure limits [PELs] as published in OSHA’s Tables Z-1, Z-1, and Z-3 of 29 CFR 1910.1000. The American Conference of Governmental Industrial Hygienists [ACGIH] Threshold Limit Values [TLVs] and NIOSH recommended exposure limits [RELs] are also primary sources for comparing measured work site concentrations. For those substances without PELs or TLVs any exposure level based on available scientific information, including SDSs, will be considered in the selection of respirators.

Protection factors (PF)** are used to determine the maximum concentration of a particular airborne contaminant in which a respirator is permitted to be used. The maximum concentration is the product of multiplying the PF times the permissible concentration (PC) obtained from OSHA’s permissible exposure limits [PELs].

Where eye irritation is a known characteristic of the contaminant, a full-face air-purifying respirator must be worn or adequate eye protection assigned. Faculty and Staff will wear corrective glasses or mask-adaptable goggles with the respirators when they do not interfere with the seal of the face piece. Contact lenses may be allowed with a full-face respirator, provided the employee has successfully worn such lenses before.

Only filter cartridges and canisters that are labeled and color-coded with the NIOSH approval label may be used. NIOSH labels will not be intentionally removed or made illegible while in service by employees. The following cartridges are available for use with half-mask and full-face respirators. Select the cartridge that is designed for the type of respirator and materials being used. Consult with the CHBO on cartridge use in situations not listed below.

| Cartridge Type | Color | Examples of Work Sites |
|-----------------------------|--------------|--|
| Organic vapor/ acid gas | Yellow | Petroleum & Acid releases |
| Organic vapor only | Black | Petroleum, Solvent or Paint Related Sites |
| Dusts/particulates/aerosols | Purple | Toxic dusts/infectious aerosols/asbestos/welding |
| Acid gas | Grey | Acid spill/chlorine/sulfur dioxide |

There are other types of cartridges that address additional classes and combined classes of airborne hazardous materials. For protection against particulates the University shall provide a filter certified for particulates by NIOSH under 30 CFR part 11 as a high efficiency particulate air [HEPA] filter, or a filter certified for particulates by NIOSH under 42 CFR part 84.

The NIOSH assigned filtration assigned number “95 rating” are masks that collect at least 95% of the challenge aerosol. Those that collect at least 99% receive a “99” rating. And those that collect at least 99.97% (essentially 100%) receive a “100” rating. Respirator filters are rated as N, R, or P for their level of protection against oil aerosols. Respirators are rated “N” if they are not resistant to oil, “R” if somewhat resistant to oil, and “P” if strongly resistant (oil proof). Thus, there are nine types of particulate respirator filters:

- N95, N-99, and N-100
- R-95, R-99, and R-100
- P-95, P-99, and P-100

The following Table identifies the potential atmospheric hazards and the appropriate respirators associated with various work activities.

| Atmospheric Hazard | Work Activity/Location | Concentration | Respirator | End of Service Life |
|---------------------------|------------------------------------|----------------------|---|----------------------------|
| Organic Vapor | Spray Painting Wood Working | <200 PPM | <u>Half Face Organic Vapor:</u> 3M Wilson | 4 hrs |
| Metal Fumes | Welding in Poorly Ventilated Areas | Variable, <IDLH | 3M <u>Half Face HEPA:</u> <u>Disposable Filtering Face piece</u> N-99 | 8 hrs 4-hrs |

| | | | | |
|-------------|-----------------------------------|-----------------------|--|--------------------|
| Metal Dusts | Machining Grinding Ceramics | <50 mg/m ³ | <u>Disposable Filtering Face piece:</u> 3M N95 or N99 | 4 hrs |
| Oil Mist | Machining | <10 mg/m ³ | <u>Half Face Organic Vapor:</u> <u>Disposable Filtering Face piece</u> Wilson 3M P-95 or P- 99 | 6 hrs 4 hrs |
| Silica | Sandblasting Ceramics | Variable <IDLH | Disposable Filtering Face piece 3M N99 | 2-4 hrs. |

3. TRAINING FOR PERSONNEL

Every employee who may have to wear a respirator will be trained in the proper use of the respirator. The CHBO or designate may have a consultant perform annual training and fit-tests, and to keep records.

This training will include:

- Description of the type and amount of exposure expected.
- Description of the respirators.
- The intended use and limitations of the respirators (e.g. cartridge life).
- Proper wearing, adjustment and testing for fit.
- Cleaning and storage methods.
- Inspection, storage and maintenance procedures.

This training must be repeated at least once a year to ensure that employees remain familiar with the proper use of respirators. This training will be provided to new employees prior to site involvement that requires use of a respirator. A record will be kept of this training and kept in the employee file. The University will consult with employees who use respirators to ascertain whether they perceive any problems with the supplied equipment and to obtain their views on the effectiveness of this Respiratory Protection Program. This Respirator Protection Program will be evaluated annually by the CHBO, or designate to determine that the program continues to be effective. At a minimum, the employee should demonstrate the training provided sufficient knowledge of:

- ❑ Why a respirator is necessary;
- ❑ How improper fit, usage, or maintenance can compromise the protective effect of the respirator;
- ❑ The limitations and capabilities of the selected respirator;
- ❑ How to deal with emergency situations involving the use of respirators;
- ❑ The medical symptoms and signs that may limit or prevent the effective use of respirators;
- ❑ Competence in using respiratory equipment; and
- ❑ The general requirements of 29 CFR 1910.134.

3.1 USER SEAL CHECK OF RESPIRATORS¹

Faculty and staff must demonstrate knowledge of putting on the respirator, proper positioning, and strap tension placement prior to the test. If they are not comfortable with this process, they shall be directed to don the mask several times and to adjust the straps each time to become adept at setting proper tension on the straps. The following criteria shall be used to determine the adequacy of the respirator fit:

- ❑ Chin properly placed;
- ❑ Adequate strap tension, not overly tightened;
- ❑ Fit across nose bridge;
- ❑ Respirator of proper size to span distance from nose to chin; and
- ❑ Tendency of respirator to slip.

¹ Appendix B-1 of OSHA 1910.134: User Seal Check Procedures

To provide protection, respirators must have an effective seal. The respirator user must be *clean-shaven* where the mask fits the face. Employees will not be allowed to have facial hair that comes between the sealing surface of the respirator and the face or that interferes with the valve function. In addition, tight-fitting respirators will not be allowed to be worn by employee with any condition that interferes with the face to face-piece seal or valve function (i.e., missing dentures, facial scars, or jewelry/equipment). If the fit of the respirator is unacceptable, the employee shall be given the opportunity to select a different respirator and to be retested.

3.2 FIT TESTS

Fit tests, I and II, must be performed by respirator users before every use. Check the integrity of the mask, especially the inhalation valves, prior to fitting onto face. First, place the wide part of the face piece over the chin, and then place the narrow portion over the nose. Put the straps over the back and top of the head and around neck, and then tighten.



3.2.1 INHALATION [NEGATIVE PRESSURE] TEST

Cover the inhalation valves (where cartridges are attached) and breathe in gently. The face piece should collapse against the face. Hold for 10 seconds. If the face piece remains slightly collapsed and no leakage is noticed around the mask, the respirator is probably sealed properly. If leakage does occur, adjust straps and repeat. Once leakage no longer occurs, go on to the exhalation test.

3.2.2 EXHALATION [POSITIVE PRESSURE] TEST

Cover the exhalation valve (center front) with hand and exhale gently. Hold for ten seconds. Note if leakage occurs. Adjust until leakage does not occur.



The negative and positive pressure tests must be passed before the chemical test may be attempted.

3.2.3 QUALITATIVE FIT TEST OF RESPIRATORS 2

All users must pass this test before the respirator can be used for the first time. Qualitative fit testing is limited to situations where the user of a negative pressure air-purifying respirator must achieve a minimum fit factor of 100 or less. Employees will be fit tested with the same make, model, style and size of respirator that will be permanently assigned to that individual based upon comfort and acceptability. It must be repeated on an annual basis.

Employees will first be tested to determine if they can detect the odor of Isoamyl acetate (Banana Oil). This will be conducted in a “blind” study between distilled water and a

² Appendix A to Sec. 1910.134:Fit Testing Procedures (Mandatory)

water/banana oil mixture. Only those employees who are able to detect the distinctive banana oil odor may proceed with this test. Place a black (organic) or yellow (organic & acid) cartridge onto respirator before proceeding with the following test.

1. A sample of banana oil (reagent isoamyl acetate - a drop or two in a tissue or in ampoule form) is waved around user's face in a controlled environment while the following exercises are performed at one-minute intervals:
2. Normal Breathing in standing position without talking
3. Deep Breathing in standing position
4. Turning Head Sideways, holding at the extreme positions momentarily to inhale
5. Move Head Up and Down and Inhale in the Up Position
6. Talking; Count backward from 100 or Read the Rainbow Passage
Note: Talking loudly can significantly impact the tightness of the fit of the respirator.
7. Bending over or Jogging in place
8. Normal Breathing
9. If the odor can be detected, leakage is occurring and further adjustments must be done. After making adjustments, repeat the chemical test. If leakage occurs or the respirator fits uncomfortably tight, a different size of mask or different brand must be tried. ***If a good fit cannot be obtained, do not use.*** Report the problem to the employee's supervisor.

Additional qualitative fit tests should be performed whenever the employee reports or the Area Supervisor observes, changes in the employee's physical condition that could affect respirator fit [i.e., new dentures, cosmetic surgery, or major weight loss or gain]. Re-testing with a different respirator may be warranted. Fit test records will be kept until the next fit test replaces the existing record date.

3.3 ROUTINE WORK-PLACE SPECIFIC USE OF RESPIRATORS

- ❑ Corrective eye wear or other equipment must not interfere with the seal of the respirator.
- ❑ No covering can be used which passes between the respirator face piece and the wearer's face.
- ❑ Respirators will be inspected before and after each use, checking straps, valves, cartridges, and etc. as well as general cleanliness.
- ❑ A user seal check (positive/negative pressure fit check) will be performed prior to each time the respirator is used.
- ❑ High contaminant levels and other factors such as high humidity can affect the filter or cartridges.

Employees noting a high resistance to breathing or the smell or taste of chemicals within the respirator, or irritation, will leave the work area immediately and report to the supervisor. After an investigation rules out other reasons, such as failure of ventilation systems, the respirator shall be checked and new filters or cartridges installed.

Leave the respirator use area to wash face and respirator face pieces to prevent skin irritation so as not to interfere with respirator performance.

When wearing a respirator, employees experiencing any of the following symptoms will leave the contaminated area:

- nausea
- dizziness
- eye irritation
- unusual odor or taste
- excessive fatigue
- difficulty breathing

An air purifying respirators may not be used for situations that are immediately dangerous to life and health (IDLH) which includes a low oxygen environment (<19.5%).

3.4 RESPIRATOR CARE AND CLEANING

To ensure that the respirator is properly cleaned and disinfected in a manner that does not cause harm to the user and that prevents damage to the respirator, the procedures specified in Appendix B-2 of OSHA 1910.134, will be followed by University employees. It is important to clean all personal protective equipment, preferably after each use.

A summary of the cleaning and inspection schedules specified in Appendix B-2 of 1910.134 follows:

1. Disassembly of components- Remove cartridges, and disassemble face piece by removing speaking diaphragms, demand and pressure demand valve assemblies, or any component s recommended by the manufacturer. Inspect parts for evidence of damage.
2. Cleaning- Wash components in warm water with mild detergent or with a manufacturer's recommended cleaning product.

3. Disinfecting-Use approximately one milliliter of laundry bleach to one liter of warm water to make a disinfectant solution to immerse components for two minutes.
4. Rinsing- Rinse components thoroughly in clean, warm water.
5. Drying- The components can be air-dried or dried with a lint-free cloth.
6. Reassemble- Check each component for evidence of damage when reassembling the respirator.

3.5 STORAGE AND MAINTENANCE PROCEDURES

Respirators will be stored in a manner that protects them from damage, contamination, harmful environmental conditions and damaging chemicals, and prevents deformation of the face piece and exhalation valve. Respirators must also be accessible to the work area. Store respirators and cartridges in sealed plastic bags or containers and keep in a cool, dry place away from contaminants.

Quarterly inspections will be conducted to ensure the continued reliability of the respiratory equipment. Inspections will be conducted before each use and during cleaning.

Repairs or adjustments should be made by persons appropriately trained and with the respirator manufacturer's NIOSH-approved parts designed for the respirator.

Check respirator function, tightness of connections, and condition of the various parts. Check the elastomeric parts for pliability and signs of deterioration. Place a tag on the respirator to document the respirator inspection date

Discarding- Defective respirators shall be removed from service and not be used by employees. Defective respirators shall be tagged "out of service" and replaced or repaired.

3.6 CARTRIDGE "LIFE"

Since cartridge breakthrough results in the respirator wearer being exposed to the hazardous atmosphere, the ideal situation is for the respirator wearer to leave the area before the End-of-Service-Life has been surpassed. Therefore, an End-of-Service-Life shall be determined by the Sr. Safety and Environmental Technician for each type of chemical cartridge or cartridges equipped with an End-of-Service-Life-Indicator shall be used.

There are two methods that shall be used to determine the End-of-Service-Life for chemical cartridges: Historical Performance and Rule-of-Thumb. The Historical Performance method relies on past observations of length of the time period cartridges remain protective in a particular situation. The Rule-of-Thumb only applies to organic vapor cartridges, and it is as follows:

- ❑ If the chemical's boiling point is $>70^{\circ}$ C and the concentration is less than 200 PPM, you can expect a service life of 8 hours at a normal work rate.
- ❑ Service life is inversely proportional to work rate.
- ❑ Reducing concentration by a factor of 10 will increase the service life by a factor of 5.
- ❑ Humidity above 85% will reduce service life by 50%.

When using filtering cartridges or filtering face pieces, the respirator wearer knows that the End-of-Service-Life has been achieved when breathing becomes difficult. When this occurs, the respirator wearer must immediately leave the hazardous atmosphere. Since the respirator wearer is never actually exposed to the contaminant, it is acceptable to determine End-of-Service-Life for filtering cartridges or filtering face pieces by observing the increased breathing resistance. However, respirators shall be equipped with new filtering cartridges at the beginning of each shift, as a minimum. Filtering face pieces shall be changed at least once per shift.

The University will make every effort to purchase cartridges with an End of Life Service Indicator [ESLI] to warn employees of end of adequate filtration. However, when an ELSI is not available, the following cartridge (sorbent) change schedule will take place:

New cartridges will be labeled in indelible ink on the date they are opened and removed from the manufacturer's protective casing. The maximum shelf-life of any opened and unused cartridge will not exceed 12 months.

Each cartridge use will be recorded on the maintenance tag that is permanently affixed to the opened cartridge.

The manufacturer's suggested service life for specific contaminants will be researched and adhered to.

Under worst-case conditions of high contaminant concentrations, humidity, temperature and airflow rate the CHBO may make appropriate changes to the cartridge change out schedule in the Laboratory/Studio Specific Standard Operating Procedure.

3.6.1 PURPLE HEPA CARTRIDGE

Cartridge life is dependent on the type of cartridge, frequency and length of time of exposure as well as the concentration of the material. HEPA cartridges (purple) filter out dust through a paper filter. At the end of their life, the holes in the filter are plugged and air cannot be inhaled through them. Discard when breathing becomes difficult.

3.6.2 CHEMICAL CARTRIDGES

Breakthrough of chemical type cartridges is indicated by odor, taste or irritation characteristics of the material. If odor, taste or irritation of the nasal passages or eyes is experienced, then leave the area and replace the cartridge. When a cartridge is removed from its original packaging, a label with the opening date must be applied to the cartridge. Once a cartridge has been removed from its sealed package, it must be discarded within 12 months. Comprehensive documentation of the use of opened cartridges will be provided on the respirator tag.

Reliance on odor thresholds and other warning properties is no longer permitted on a job-site. The above change out schedule will be revised upon receipt of OSHA breakthrough data reports or manufacturers data submissions to the public.

4. MEDICAL MONITORING

As a minimum medical evaluation, a Medical Questionnaire equal to that described in Mandatory-Appendix C of the regulation 29 CFR 1910.134, may be used to ascertain an employee's ability to use a respirator. A medical evaluation by a Licensed Physician will be required for all University employees at the onset of employment. The Physician or a licensed health care professional will determine whether or not an employee is capable of tolerating the increased physiological load associated with respirator use. UT will obtain a written recommendation from the Licensed Physician or licensed health care professional on whether or not the employee is medically able to use a respirator.

Where there is any doubt about the ability to wear a respirator by the employee or Area Supervisor, the employee is to be examined or reexamined by a physician. Certain medical conditions may affect an employee's ability to wear a respirator, such as lung disease (e.g. asthma, emphysema); heart disease (hypertension); epilepsy and claustrophobia. The Licensed Physician or licensed health care professional shall recommend follow-up treatment or care if the results of the physical warrant such action.

The mandatory medical questionnaire found in Appendix C of the OSHA Respiratory Standard, 29 CFR 1910.134, will be completed by each employee and retained with the medical files of the Licensed Physician or licensed health care professional indefinitely. All medical physicals and completion of the questionnaire will be administered confidentially and during routine working hours. Employees cannot refuse to undergo medical evaluation and continue in a job that requires respirator use.



Respirator Protection Program Policy *Effective January 2015*

UT has chosen the following options for the company's licensed health care professionals.

Dr. Robin R. Hughes, MD
Tampa Occupational Health
2919 W. Swann Ave Ste. #402
Tampa, FL 33609
(813) 414-9400

Dr. Jorge Trujillo, MD
US Health Works Medical Group
4728 N. Habana Avenue, Ste. 102
Tampa, FL 33614
(727) 586-0138

Employee medical charts and analytical laboratory results will not be disclosed to the University. Instead, a written recommendation regarding the employee's ability or limitations to use the respirator will be provided from the Licensed Physician. Employees are encouraged to discuss the results of the evaluation with the representatives of the licensed health care provider.

The company will provide the licensed health care professional with the following supplemental information:

- Type and weight of respirator to be used by the employee;
- Duration and frequency of use;
- Expected physical work effort;
- Additional protective clothing and equipment to be worn;
- Temperature and humidity extremes that may be encountered; and
- Proof of Respiratory Protection Program

5. CONTRACTOR RESPIRATORY PROTECTION

Any contractor who conducts business on site shall coordinate with the CHBO to assure that all personnel are aware of the potential respiratory hazards associated with their work activities on University property.

Contractor employers whose personnel wear respirators shall be required to implement a respiratory protection program designed to fulfill the regulatory requirements and to supply appropriate respiratory protection.

6. NON-MANDATORY RESPIRATOR USE

Appendix D of the OSHA Respirator Regulation 1910.134 provides the following mandatory information to employees using respirators when not required under the standard.³

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.*

The voluntary use of an elastomeric mask requires that the employer have a written program, ensure the employee is medically able to use the respirator, and that the respirator does not present a health hazard and provide a copy of Appendix D to the employee. If the employee

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



supplies their own respirator, the cost of the respirator and cartridges would be the responsibility of the employee. For voluntary users wearing dust masks, the employer must provide at no cost to the employee, a copy of Appendix D as included in this section. Where respiratory protection is required either by the employer or by the OSHA, the employer must pay all costs associated with the standard.

7. RESPIRATORY PROGRAM EVALUATION

A documented appraisal of the effectiveness of the respirator program shall be carried out at least annually. Actions shall be taken to correct any inadequacies that are identified.



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8. MANDATORY MEDICAL EVALUATION QUESTIONNAIRE OSHA 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. inches _____
6. Your job title: _____
7. A phone number where you can be reached by the health care professional who reviews this questionnaire (include the Area Code): _____
8. The best time to phone you at this number: _____
9. Has your employer told you how to contact the health care professional who will review this questionnaire (circle one): Yes No
10. Check the type of respirator you will use (you can check more than one category):
11. N, R, or P disposable respirator (filter-mask, non-cartridge type only).
12. Other type (for example, half- or full-face piece type, powered-air purifying, supplied-air, self-contained breathing apparatus).
13. 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 (except when you had a cold) | 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: | | |



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- Table with 3 columns: Question, Yes, No. Contains questions 4 through 8 regarding respiratory and cardiovascular symptoms.



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9. Would you like to talk to the health care professional who will review this questionnaire about your answers to this questionnaire: Yes No

8.1 SUPPLEMENTAL RESPIRATOR QUESTIONS

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

- | | | | |
|----|--|-----|----|
| 1. | Have you ever lost vision in either eye (temporarily or permanently): | Yes | No |
| 2. | 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 |
| 3. | Have you ever had an injury to your ears, including a broken ear drum: | Yes | No |
| 4. | 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 |
| 5. | Have you ever had a back injury: | Yes | No |
| 6. | 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. Difficulty 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 |

8.2 PART B SUPPLEMENTAL QUESTIONS

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.



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- 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:

Blank lines for writing chemical names.

- 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:

Blank lines for describing exposures.

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

Blank lines for listing second jobs or side businesses.

- 5. List your previous occupations:

Blank lines for listing previous occupations.



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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.



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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):



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

Multiple horizontal lines for writing the answer to question 17.

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:

Two horizontal lines for writing the answer to the final question.



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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):



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9. Apéndice C: Cuestionario de Evaluación Médico obligado por la OSHA (La agencia de seguridad y salud ocupacional)

Parte 29 CFR 1910.134 Mandatorio para Proteccion del Sistema Respiratorio

Marque con un circulo para indicar sus respuestas a cada pregunta.

Para el empleado: Puede usted leer (circule uno): Sí No

Su patrón debe dejarlo responder estas preguntas durante horas de trabajo o en un tiempo y lugar que sea conveniente para usted. Para mantener este cuestionario confidencial, su patrón o supervisor no debe ver o revisar sus respuestas. Su patrón debe informarle a quien dar o enviar este cuestionario para ser revisado por un profesional de sanidad con licencia autorizado por el estado.

Parte A. Sección 1. (Mandatorio). La siguiente información debe de ser proveida por cada empleado que ha sido seleccionado para usar cualquier tipo de respirador (escriba claro por favor).

1. Fecha : _____

2. Nombre: _____

3. Edad: _____

4. Su sexo (circule uno) Masculino Femenino

5. Altura: _____ pies _____ pulgadas

6. Peso: _____ libras

7. Su ocupación, título o tipo de trabajo: _____

8. Número de teléfono al donde pueda ser llamado por un profesional de sanidad con licencia que revisara este cuestionario (incluya el área): _____

9. Indique la hora mas conveniente para llamarle a este numero: _____



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10.)Le ha informado su patrón como comunicarse con el profesional de sanidad con licencia que va a revisar este cuestionario (circule una respuesta)?.....Sí No

11. Anote el tipo de equipo protector respiratorio que va utilizar (puede anotar mas de una categoría)
a. _____Respirador disponible de clase N, R, o P (por ejemplo: respirador de filtro mecánico, respirador sin cartucho)
b. _____Otros tipos (respirador con cartucho químico, máscara con cartucho químico, máscara con manguera con soplador (PAPR),máscara con manguera sin soplador (SAR), aparato respiratorio autónomos (SCBA)).

12.)Ha usado algun tipo de respirador ?.....Sí
No

Si ha usado equipo protector respiratorio, que tipo(s) ha utilizado:

Blank lines for handwritten answers to question 12.

Parte A. Seccion 2. (Mandatorio): Preguntas del 1 al 9 deben ser contestadas por cada empleado que fue seleccionado a usar cualquier tipo de respirador. Marque con un circulo para indicar sus repuestas.

1.)Corrientemente fuma tabaco, o ha fumado tabaco durante el ultimo mes?..... Sí
No

2.)Ha tenido algunas de las siguientes condiciones medicas?
a. Convulsiones :.....Sí
No
b. Diabetes (azucar en la sangre):.....Sí No
c. Reacciones alergicas que no lo deja respirar:Sí
No
d. Claustrofobia (miedo de estar en espacios cerrados):.....Sí
No
e. Dificultad oliendo excepto cuando ha cogido un resfriado:.....Sí
No

3.)Ha tenido algunas de los siguientes problemas pulmonares?
a. Asbestosis:.....Sí
No
b. Asma:.....Sí
No
c. Bronquitis cronica:Sí
No
d. Emfisema:Sí
No
e. Pulmonía:.....Sí



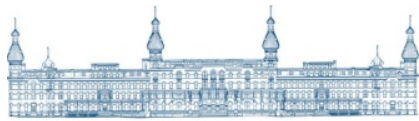
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- No
f. Tuberculosis: ... Sí
No
g. Silicosis: ... Sí No
h. Neumotorax (pulmon colapsado): ... Sí No
i. Cáncer en los pulmones: ... Sí
No
j. Costillas quebradas: ... Sí
No
k. Injuria o cirujía en el pecho: ... Sí
No
l. Algun otro problema de los pulmones que le ha dicho su medico: ... Sí
No

- 4.)Corrientemente tiene alguno de los siguientes síntomas o enfermedades en sus pulmones?
a. Respiración dificultosa ... Sí
No
b. Respiración dificultosa cuando camina rapido sobre terreno plano o subiendo una colina
: Sí No
c. Respiración dificultosa cuando camina normalmente con otras personas sobre terreno plano:
Sí No
d. Cuando camina normalmente en terreno plano se encuentra corto de resuello? ... Sí No
e. Respiración dificultosa cuando se esta bañando o vistiendo: ... Sí No
f. Respiración dificultosa que lo impede trabajar: ... Sí No
g. Tos con flema: ... Sí No
h. Tos que lo despierta temprano en la mañana: ... Sí No
i. Tos que ocurre cuando esta acostado: ... Sí No
j. Ha tosido sangre en el ultimo mes: ... Sí No
k. Silbar o respirar con mucha dificultad: ... Sí No
l. Silbar que lo impede trabajar: ... Sí No
m. Dolor del pecho cuando respira profundamente: ... Sí No
n. Otros síntomas que crea usted estar relacionados a los pulmones: ... Sí No

- 5.)Ha tenido algunos de los siguientes problemas con el corazón?
a. Ataque cardiaco: ... Sí No
b. Ataque cerebrovascular: ... Sí No
c. Dolor en el pecho: ... Sí No
d. Falla de corazón: ... Sí No
e. Hinchazón en las piernas o pies (que no sea por caminar): ... Sí No
f. Latidos irregulares del corazón: ... Sí No
g. Alta presión: ... Sí No
h. Algun otro problema cardio-vascular o cardiaco: ... Sí No

- 6.)Ha tenido algunos de los siguientes síntomas causados por su corazón?
a. Dolor de pecho frecuente o pecho apretado: ... Sí No
b. Dolor o pecho apretado durante actividad fisica: ... Sí No
c. Dolor o pecho apretado que no lo deja trabajar normalmente: ... Sí No
d. En los ultimos dos años ha notado que su corazón late irregularmente: ... Sí No
e. Dolor en el pecho o indigestion que no es relacionado a la comida: ... Sí No
f. Algunos otros síntomas que usted piensa ser causado por problemas de su corazón o de su circulation.
..... Sí No



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- 7.)Esta tomando medicina por alguno de los siguientes problemas?
a. Respiración dificultosa: Sí No
b. Problemas del corazón: Sí No
c. Alta presión : Sí No
d. Convulsiones: Sí No

- 8.)Le ha causado alguno de los siguientes problemas usando el respirador? (si no ha usado un respirador, deje esta pregunta en blanco y continúe con pregunta 9).
a. Irritación de los ojos: Sí No
b. Alergias del cutis o sarpullido: Sí No
c. Ansiedad que ocurre solamente cuando usa el respirador: Sí No
d. Debilidad, falta de vigor o fatiga des acostumbrada: Sí No
e. Algun otro problema que le impida utilizar su respirador: Sí No

- 9.)Le gustaria hablar con el profesional de sanidad con licencia autorizado por el estado que revisara este cuestionario sobre sus respuestas? Sí No

9.1 Las preguntas del 10 al 15 deben ser contestadas por los empleados seleccionados para usar una máscara con cartucho químico o aparato respiratorio autónomo (SCBA). Los empleados que usan otro tipo de respirador no tienen que contestar estas preguntas.

- 10.)Ha perdido la vista en cualquiera de sus ojos (temporalmente o permanente): Sí No

- 11.)Corrientemente tiene algunos de los siguientes problemas con su vista?
a. Usa lentes de contacto: Sí No
b. Usa lentes: Sí No
c. Daltoniano (dificultad distinguiendo colores): Sí No
d. Tiene algún problema con sus ojos o su vista: Sí No

- 12.)Ha tenido daño en sus oidos incluyendo rotura del tímpano: Sí No

- 13.)Corrientemente tiene uno de las siguientes problemas para oír?
a. Dificultad oyendo: Sí No
b. Usa un aparato para oír: Sí No
c. Tiene algun otro problema con sus oidos o dificultad escuchando: Sí No

- 14.)Se ha dañado o lastimado su espalda? Sí No

- 15.)Tiene uno de los siguientes problemas de su aparato muscular or esqueleto?
a. Debilidad en sus brazos, manos, piernas o pies : Sí No



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- b. Dolor de espalda: Sí No
c. Dificultad para mover sus brazos y piernas completamente: Sí No
d. Dolor o engarrotamiento cuando se inclina para adelante o para atras: Sí No
e. Dificultad para mover su cabeza para arriba o para abajo completamente: Sí No
f. Dificultad para mover su cabeza de lado a lado: Sí No
g. Dificultad para agacharse doblando sus rodillas: Sí No
h. Dificultad para agacharse hasta tocar el piso: Sí No
i. Dificultad subiendo escaleras cargando mas de 25 libras: Sí No
j. Alguno problema muscular o con sus huesos que le evite usar un respirador: Sí No

9.2 Parte B - Las siguientes preguntas pueden ser agregadas al cuestionario a discrecion del profesional de sanidad con licencia autorizado por el estado.

1.)Esta trabajando en las alturas arriba de 5,000 pies o en sitios que tienen menos oxígeno de lo normal?
Si la respuesta es ASÍ, se ha sentido mareado, o ha tenido dificultad respirando, palpitaciones, o cualquier otro síntoma que usted no tiene cuando no esta trabajando bajo estas condiciones:

2.)En el trabajo o en su casa, ha estado expuesto a solventes o contaminantes peligrosos en el aire (por ejemplo, humos, neblina o polvos) o ha tenido contacto del cutis con químicas peligrosas?
Escriba las químicas y productos con las que ha estado expuesto, si sabe cuales

son:

- 3.)Ha trabajado con los siguientes materiales o las condiciones anotadas abajo?:
a. Asbestos: Sí No
b. Sílice (Limpiar mediante un chorro de arena): Sí No
c. Tungsteno/Cobalto (pulverizar o soldadura): Sí No
d. Berilio: Sí No
e. Aluminio: Sí No
f. Carbón de piedra (minando): Sí No
g. Hierro: Sí No
h. Estaño: Sí No
i. Ambiente polvoriento: Sí No
j. Otra exposicion peligrosa: Sí No

Describe las exposiciones peligrosas:



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4.)Tiene usted otro trabajo o un negocio aparte de este?

5. Apunte su previos trabajos:

6. Apunte sus pasatiempos:

7.)Tiene servicio militar?.....Sí No
Si la respuesta es ASÍ, ha estado expuesto a agentes químicos o biológicos durante entrenamiento o
combate: Sí No

8.)Alguna vez ha trabajado en un equipo de HAZMAT (equipo respondedor a incidentes de materiales peligrosos con emergencia)?.....Sí No



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9.)Esta tomando alguna medicina que no haya mencionado en este cuestionario (incluyendo remedios caseros o medicinas que compra sin receta)?.....Sí No

Si la respuesta es ASÍ, cuales
son _____

10.)Va a usar algunas de las siguientes partes con su respirador?

- a. filtros HEPA (filtro de alta eficiencia que remueve partículas tóxicas en la atmósfera):.....Sí No
- b. Canastillo (por ejemplo, máscara para gas):.....Sí No
- c. Cartuchos:.....Sí No

11.)Cuántas veces espera usar un respirador?

- a. Para salir de peligro solamente (no rescates):.....Sí No
- b. Recates de emergencia solamente:.....Sí No
- c. Menos de 5 horas *por semana*:.....Sí No
- d. Menos de 2 horas *por día*:.....Sí No
- e. 2 a 4 horas *por día*:.....Sí No
- f. Mas de 4 horas *por día*:.....Sí No

12.)Durante el tiempo de usar el respirador, su trabajo es...?

a. **Ligero** (menos de 200 kcal por hora):.....Sí No

Si la respuesta es Así, cuanto tiempo dura la obra _____horas_____minutos

Ejemplos de trabajos ligeros: estar sentado escribiendo, escribiendo a máquina, diseñando, trabajando la línea de montaje, o estar parado gobernando un taladro o máquinas:

b. **Moderado** (200-350 kcal por hora):.....Sí No

Si la respuesta es Así cuanto tiempo dura en promedio por jornada _____horas_____minutos

Ejemplos de trabajos moderados : sentado clavando o archivando; manejando un camión o autobús en trafico pesado; estar de pie taladrando, clavando, trabajando la línea de montaje, o transfiriendo una carga (de 35 libras) a la altura de la cintura; caminando sobre tierra plana a 2 millas por hora o bajando a 3 millas por hora; empujando



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una carretilla con una carga pesada (de 100 libras) sobre terreno plano.

c. Pesado (mas de 350 kcal por hora):Sí No

Si la respuesta es Así cuanto tiempo dura en promedio por jornada _____ horas _____ minutos

Ejemplos de trabajos pesados: levantando cargas pesadas (mas de 50 libras) desde el piso hasta la altura de la cintura o los hombros; trabajando cargando o descargando; transpalar; estar de pie trabajando de albañil o demenzando moldes; subiendo a 2 millas por hora; subiendo la escalera con una carga pesada (mas de 50 libras).

13.)Va a estar usando ropa o equipo protectivo cuando use el respirador?.....Sí No

Si la respuesta es Así describa que va a estar usando_____

14.)Va a estar trabajando en condiciones calurosas (temperatura mas de 77 grados F)?.....Sí No

15.)Va a estar trabajando en condiciones humedas?Sí No

16. Describa el tipo de trabajo que va a estar usted haciendo cuando use el respirador.

17. Describa cualquier situacion especial o peligrosa que pueda encontrar cuando este usando el respirador (por ejemplo, espacios encerrados, gases que lo puedan matar, etc.)

18. Provea la siguiente informacion si la sabe, por cada sustancia tóxica que usted va a estar expuesto cuando este usando el respirador(s):



**Respirator Protection Program
Medical Evaluation Questionnaire
Mandatory Form**
September 2016

Nombre de la primera sustancia tóxica _____

Maximo nivel de exposición por jornada de trabajo _____

Tiempo de exposición por jornada _____

Nombre de la segunda sustancia tóxica _____

Maximo nivel de exposición por jornada de trabajo _____

Tiempo de exposición por jornada _____

Nombre de la tercera sustancia tóxica _____

Máximo nivel de exposición por jornada de trabajo _____

Tiempo de exposición por jornada _____

El nombre de cualquier sustancia tóxica que usted va a estar expuesto cuando este usted usando el
respirador _____

19. Describa alguna responsabilidad especial que usted va a tener cuando usted este usado el respirador(s) que pueda afectar la seguridad o la vida de otros (por ejemplo, rescate, seguridad).