Benedictine University

RESPIRATORY PROTECTION PROGRAM

Updated: November 2023

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Respiratory Protection Program

PURPOSE

Benedictine University (the "University") establishes this Respiratory Protection Program (RPP) to protect the health of University employees and students and to assure compliance with state and federal occupational safety and health standards. This RPP is designed to meet the requirements of the Occupational Safety and Health Administration (OSHA) 29 CFR 1910.134 Respiratory Protection Standard enforced by the Illinois Department of Labor. A copy of the OSHA Respiratory Protection Standard (29 CFR 1910.134) is found in APPENDIX 4.

This RPP includes information pertaining to the areas of administration, hazard evaluation, selection, medical evaluation, training, fit-testing, inspection, maintenance, record keeping, work area surveillance, air quality standards, approved respirators, and program evaluation. In addition, the Program outlines the responsibilities of Emergency Preparedness Manager, Deans, Directors, Department Heads, Supervisors, Employees/Students and the Physician or other Licensed Health Care Professional. It is the responsibility of the individual units using respirators to develop department-specific written standard operating procedures to complement this general program.

POLICY

It is the policy of the University to provide its employees and students with a safe and healthful work environment. This is accomplished as far as feasible with accepted engineering and administrative controls. Where these methods are not feasible or are inadequate, respiratory protection is provided at no cost to the user. In these instances, employees and students will use respirators to reduce their exposure to harmful ambient contaminant concentrations. Respirator use may be mandatory or voluntary. The requirements in this program will apply to both situations.

SCOPE

The provisions of this RPP shall apply to all employees and students in any university workplace:

A. Where respirators are necessary to protect the health of university employees and students;

B. Wherever the University requires respirators to be worn: and

C. Where respirators are voluntarily worn for comfort, personal reasons or emergencies.

DEFINITIONS

The following definitions are important terms used in the respiratory protection program.

Acid Gas (AG): Acidic substance in a volatile state.

Air Purifying Respirator (APR): Respirators with a purifying or cleansing filter, cartridge or canister that removes specific air contaminants through negative pressure.

Compressed Gas Association (CGA): Voluntary organization that provides criteria for the use of compressed gas and standards.

Code of Federal Regulations (CFR): The *Code of Federal Regulations* (CFR) is a codification of the general and permanent rules published in the *Federal Register* by the Executive departments and agencies of the Federal Government. Respiratory protection occurs in the Occupational Safety and Health Administration's 29 CFR 1910.34.

Designated Representative: means any individual or organization to whom an employee gives written authorization to exercise a right of access. For the purposes of access to employee exposure records and analyses using exposure or medical records, a recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

Filtering Faceplate: (Dust Mask) A negative pressure particulate respirator with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. Whenever a filtering facepiece is used to meet the requirements of the standard it must be National Institute for Occupational Safety and Health (NIOSH) approved.

Fit factor: A quantitative estimate of the fit of a particular respirator to a specific individual. Typically estimates of the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

High Efficiency Particulate Air Filter (HEPA): A filter that is at least 99.97% efficient in removing mono-dispersed particles of 0.3 microns in diameter. The equivalent NIOSH 42 CFR 84 particulate filters are the N100, R100 and P100 filters.

Immediately Dangerous to Life and Health (IDLH): An atmosphere that poses an immediate threat to life that would cause irreversible adverse health effects or would impair an individual's ability to escape from a dangerous atmosphere.

NIOSH: The National Institute for Occupational Safety and Health. A Department of Health and Human Services organization that conducts research on occupational safety and health issues.

Organic Vapor (OV): Synthetic or naturally occurring carbon-containing compound in the vapor state, which can be inhaled and cause undue respiratory harm.

Permissible Exposure Limit (PEL): An exposure limit published and enforced by OSHA as a legal standard.

Physician or other Licensed Health Care Professional (PLHCP): An individual whose legally permitted scope of practice (license, registration or

certification) allows him or her to independently provide, or be delegated the responsibility to provide medical evaluations and consultation.
PAPR: Powered Air Purifying Respirator means an air purifying respirator that uses a blower to force ambient air through air purifying elements to the inlet covering.
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 the respirator fit by numerically measuring the amount of leakage into the respirator.
Supplied Air Respirator (SAR): Also known as airline respirators. An atmosphere-supplying respirator for which the source of breathing air is designed to be remotely located and supplied to the user by a pressurized airline.
Self-Contained Breathing Apparatus (SCBA): An atmosphere–supplying respirator for which the breathing air source is designed to be carried by the user.

RESPONSIBILITIES

Emergency Preparedness Manager shall:

A. Develop and implement a written respiratory protection program and provide at least an annual review of the program.
B. Conduct hazard evaluations and/or air monitoring upon request by the academic or administration department and as needed to assure adequate protection of employees and students is provided.
C. Assist supervisors in the selection of appropriate respiratory protection.
D. Provide or arrange for training on respiratory protection for supervisors and respirator users.
E. Arrange for fit testing of respirator wearers.
F. Maintain training and fit-testing records as outlines in this document.
G. Assist academic and administrative departments in drafting written programs when tight-fitting respirators are not required but are voluntarily worn by employees. The program shall include elements to ensure that the use of these respirators does not in itself create a hazard. Employees must be medically able to use the respirator and the respirator shall be cleaned, stored, and maintained so that its use does not present a hazard to the user. NIOSH-approved respirators are required for voluntary use of a tight-fitting respirator. Information on the requirements of this program is provided in APPENDIX 5.
H. Assure that all respirators used meet the standard requirements and are NIOSH-certified.

Deans, Directors and Department Heads shall:

Assist supervision in establishing the Respiratory Protection Program as a means of providing for the health and safety of employees.

Supervisors of employees and students who may require respiratory protection shall:

A. Provide respirators, training and medical evaluations at no cost to the employee or student.
B. Survey the work area conditions, degree of exposure or stress and contact the Emergency Preparedness Manager when they suspect that conditions exist that may require a respirator be worn when performing a task.
C. Contact the Emergency Preparedness Manager to determine voluntary use of respirators.
D. Attend training on proper selection, storage, use and maintenance of respiratory protective equipment when individuals they supervise are required to use such equipment.
E. Supply appropriate, approved respirators and necessary replacement parts and equipment (i.e., cartridges and replacement parts) at no cost to the employee.
F. Assure that the requirements of this program are observed with respect to hazard evaluation, selection, medical evaluations, training, fit-testing and recordkeeping.
G. Develop a document establishing Standard Operating Procedures (SOP) such as the one found in APPENDIX 1. The purpose of written SOP is to delegate responsibilities to specific personnel; to record the selection of respirators for specific tasks/hazards; and to develop written procedures for safe use of respirators in potentially dangerous atmospheres that might be encountered in normal operations or in emergencies.
H. Conduct annual inspection and evaluation to determine the continued effectiveness of the program.

The Employee/Student shall:

A. Report to the supervisor any operation or job suspected of requiring the use of respiratory protective equipment.
B. Attend training on the respiratory protection as required by this program.
C. Use respirators in accordance with instruction and training received.
D. Remain clean-shaven where facial hair may prevent a good face seal when required to use negative-pressure or tight-fitting positive-pressure respirators.
E. Refrain from using respirators that fail inspection and immediately report to a supervisor problems associated with the unit.

F. Notify supervisor of a change in health status (especially circulatory or respiratory health), weight gain or loss of 20 pounds or more, a change in dental situation (teeth or dentures), or substantial scarring in the facial area. (These factors may affect the individual's ability to maintain a proper fit for using a respirator.)

Physician or other licensed health care professional

The Physician or other licensed health care professional that determines an individual's ability to wear a respirator shall:

A. Establish medical and physical criteria for users of respirators.
B. Provide the Emergency Preparedness Manager with written results of the medical evaluation as it applies to the employee's ability to wear a respirator.

VOLUNTARY USE

A written respiratory protection program shall not be required for those employees whose only use of respirators involves filtering facepiece (dust masks). Filtering facepiece or dust masks are negative pressure respirators with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. NIOSH-approved respirators are strongly recommended but not required for voluntary use.

Normally respirators that are voluntarily used by individuals will be filtering facepiece (dust masks). For filtering facepiece respirator use, the university must make a reasonable effort to ensure that the dust masks are not dirty or contaminated, that the use does not interfere with the employee's ability to work safely, and that a copy of APPENDIX 5 is provided to each voluntary wearer. Use of elastomeric or supplied-air respirators, even when voluntary on the part of the employee, will require the university to include all elements in a written program that will ensure that the use of these respirators does not create a hazard.

The academic or administrative unit may provide respirators at the request of employees or permit employees to use their own respirators, if the Emergency Preparedness Manager determines that such respirator use will not in itself create a hazard. If the Emergency Preparedness Manager determines that the respirator use is permissible, the academic or administrative department shall provide the respirator users with the information contained in the OSHA Standard (See APPENDIX 4.) These persons shall also participate in all applicable portions of the Respiratory Protection Program as deemed necessary by the Emergency Preparedness Manager.

SELECTION OF RESPIRATOR

Selection of proper respirator(s) to be used in any location or operation under control of the University may occur only after a determination has been made as to the real and/or potential exposure of individuals to a harmful concentration of contaminants in the workplace atmosphere. The Emergency Preparedness Manager will conduct hazard evaluations of the workplace, including air monitoring.

Respirator selection shall be based on the Occupational Safety & Health Administration (OSHA) Standard for Respiratory Protection 29 CFR 1910.134, and shall be determined by the supervisor in conjunction with the Emergency Preparedness Manager. Selection of respirators shall be based on the following criteria: (See APPENDIX 2)

A. The nature of the hazardous operation/process and assumed or measured hazardous exposure levels.
B. The nature of the respiratory hazard, including physical and chemical properties, adverse health effects of the hazard and warning properties of the hazard.
C. The period of time for which respiratory protection must be worn.
D. The characteristics and limitations of available respirators, including assigned protection factor, as indicated in APPENDIX 6.
E. Fit testing results.
F. The physical ability of user to wear available respirators.

If a contaminant is not regulated by a substance-specific standard that requires air monitoring, other means can be used to estimate workplace exposures. These include the use of objective data (industry studies, trade association tests conducted by chemical manufacturers) indicating that air contaminants cannot be released into the workplace in airborne concentrations that are immediately dangerous to life and health (IDLH). Supervisors must document the use of this objective data in their department-specific programs. The application of mathematical approaches may be used, such as physical and chemical properties of contaminants, combined with information on room dimensions, air exchange rates, chemical release rates, etc.

Only those respirators that are approved by NIOSH are allowed for use at the University.

TRAINING

Training will be done using the VelocityEHS software program on an annual basis. Supervisors must notify the Emergency Preparedness Manager of the employee's need to have Respiratory Protection training. The Emergency Preparedness Manager will set up the employee in the system and send an email with the login and password information. The employee will then complete the online training.

A record of training shall be maintained for five years beyond the last date of employment of the respirator wearer by the Emergency Preparedness Manager.

MEDICAL EVALUATION

A medical evaluation is required to determine whether or not the employee is physically able to wear a respirator without an adverse health effect. The employee must be medically evaluated prior to fit testing and the wearing of a respirator.

The University will supply the medical evaluation at no cost to the employee. Appointments can be arranged through Concentra.

The employee will need to pick up the Employer Services Patient Information and Authorization for Examination or Treatment Forms (APPENDIX 7) and the OSHA Respirator Medical Evaluation Questionnaire (APPENDIX 8) from the Emergency Preparedness Manager located in the Campus Safety Department, room 132 before going to the appointment.

The examination will be administered confidentially during normal working hours or at a time convenient to the employee.

FIT TESTING

Fit testing is required for all individuals using negative pressure or positive pressure, tight-fitting respirators, where such respirators are required by the Illinois Department of Labor or by the University. A fit test is not required for voluntary user or for escape-only respirators. Fit-testing will not be conducted until the respirator wearer has received PLHCP's written approval to wear a respirator.

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

Individuals using a tight-fitting facepiece respirator will pass either a qualitative fit test (QLFT) or a quantitative fit test (QNFT). After the initial fit test, either the QLFT or the QNFT will be done annually.

An additional fit test shall be done whenever the respirator user, the Emergency Preparedness Manager, Concentra, or the supervisor reports visual observations of changes in the individual's physical condition that could affect respirator fit. These conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or obvious changes in body weight.

Individuals have the responsibility to immediately notify the supervisor, the Emergency Preparedness Manager or Concentra that the fit of the respirator is unacceptable. If so, they shall be given a reasonable opportunity to select a different respirator facepiece and to be retested.

QLFT shall be used to fit test negative pressure air-purifying respirators if the units will only be worn in atmospheres that are less than ten times the Permissible Exposure Limit (PEL). That is, the respirator must achieve a fit factor of 100 or less as outlined by the protocols listed in the Fit Test Protocol (29 CFR 1910.134).

For atmospheric concentrations greater than ten times the PEL, QNFT shall be used. When quantitative fit testing is used, all full-facepiece respirators shall meet or exceed a fit factor of 500. Quarter and half-mask respirators shall meet or exceed a fit factor of 100.

For all positive pressure, atmosphere-supplying respirators, either qualitative or quantitative fit testing may be used. While atmosphere-supplying respirators are fit tested in the negative pressure mode, these respirators are most often used as positive pressure respirators in the work place. Positive pressure atmosphere-supplying respirators that pass the QLFT fit test may be used at the higher protection factors assigned these respirators.

Fit testing will be performed by Concentra. The employee must bring his/her respirator to the appointment.

The University will supply fit testing at no cost to the employee.

PROPER USE OF RESPIRATORS

The University establishes procedures for the proper use of respirators with this respiratory protection program. These procedures include prohibiting conditions that may result in facepiece leakage, preventing users from removing respirators in hazardous environments, ensuring continued respirator operation throughout the shift, and establishing procedures for the use of respirators in atmospheres that are IDLH. These procedures include:

A. Employees or students with facial hair that interferes with the sealing surfaces of the respirator shall not be issued a tight-fitting respirator because there is not assurance that the respirator will fit under the conditions of use. Individuals

who have been issued a respirator shall remain clean-shaven when required to wear a tight-fitting respirator.

B. Employees or students who wear glasses that interfere with the sealing surface of a full-face respirator shall not be issued a tight-fitting respirator unless they can safely work without the aid of eye glasses. Exception: If provisions have been made for the acquisition of temple-less glasses that fit into the respirator facepiece, then a tight-fitting full facepiece respirator may be used.

C. Negative and/or positive fit-checks shall be demonstrated in training and shall be performed by the respirator wearer each time the individual dons a tight-fitting respirator.

D. Regular surveillance of the effectiveness of the respirator program will occur through periodic communications or on-site observations of workplaces requiring the use of respirators. Also, notations of any problems regarding the effectiveness of the respirators shall be communicated to the Emergency Preparedness Manager by employees, students, supervisors, or principal investigators.

E. No workplace policies shall prohibit or impede individuals who wear respirators from leaving the work area should they develop either a significant problem with the respirator or a need to replace the filters or cartridges.

F. Individuals who must leave the area after a significant respirator failure shall not re-enter a workplace without first assuring the proper functioning of the respirator.

G. A change schedule for canisters and cartridges shall be implemented and based upon objective information or data that will ensure that canisters and cartridges are changed before the end of their service life. (An end of service life indicator on the canisters or cartridges may be used if available.) Change schedules shall be based upon objective data. Typical sources can include respirator manufacturers, industry organizations, and chemical characteristics.

USE OF RESPIRATORS IN IDLH ATMOSPHERES

Work atmospheres that are deemed IDLH are those that pose an immediate threat to life, could cause irreversible health effects, or could impair an individual's ability to escape from a dangerous atmosphere. Supervisory staff and principal investigators must be prepared for emergency rescue or respirator failure whenever employees or students are working inside of an IDLH atmosphere. At no time will anything less than a self-contained breathing apparatus (SCBA) be worn in an area deemed IDLH.

A. **Buddy system**. In IDLH atmospheres or potential IDLH atmospheres where a toxic or oxygen-deficient atmosphere could overcome the wearer with failure of the respirator, at least one additional worker shall be present.

B. **Communications.** Communications (visual, voice, or signal line) shall be maintained between workers present in IDLH atmospheres.

C. **Rescue**. Stand-by workers must be available with suitable rescue equipment, including the use of safety harnesses and safety lines, for removing persons working in IDLH atmospheres.

MAINTAINING RESPIRATORS

Routine cleaning, disinfection and maintenance of the respirator are the responsibility of the wearer. The respirator is to be cleaned and disinfected as often as necessary to be maintained in a sanitary condition.

Inspection

All negative and positive pressure respirators shall be inspected before each use and during cleaning. In addition, breathing cylinders of any SCBA shall be inspected to assure that the cylinder pressure is maintained at 90% of the manufacturer's recommended pressure level and that regulator and low-pressure warning devices function properly.

Respirators shall be inspected to ensure that they are in proper working condition. Remove filters, cartridges or canisters. Disassemble the face piece to the extent instructed by the manufacturer. The respirator shall be inspected to determine if it is in need of replacement parts or repairs, or if it should be discarded. Inspection shall include:

A. Checking all rubber and elastomeric parts for pliability and deterioration;

B. Condition of facepiece, head straps, valves and cartridges, filters and/or canisters;

C. Checking the function of the respirator.

D. Condition of hoses, tubes, regulators, alarm systems and air supply;

E. Missing or broken connectors, gaskets, O-rings and hose clamps; and

F. Air cylinder charge and condition of air-compressor components.

Respirators that do not meet applicable inspection criteria shall be immediately removed from service.

Cleaning and Disinfecting

Respirators issued to an individual shall be cleaned and disinfected regularly. Shared and emergency-use respirators shall be cleaned and disinfected after each use.

Manufacturer's recommended procedures shall be followed when cleaning a respirator. Generally, respirators shall be disassembled and cleaned in warm, soapy water. If the cleaner does not contain a disinfecting agent, the respirator components should be immersed for two minutes in a bleach solution (one liter water to one milliliter household bleach) or one of the following:

Hypochlorite solution (50 ppm chlorine)
Aqueous solution of iodine (50 ppm)
Other disinfectants approved by the manufacturer that are equally potent

Respirators shall then be thoroughly rinsed in warm water and air-dried.

All respirators not discarded after one use, except filtering facepiece, must be cleaned on a daily basis. If respirators are used infrequently then they must be cleaned after each use. Individuals who are assigned respirators or designated to wear respirators by the Respiratory Protection Program must clean the respirators according to the manufacturer's instructions. Facilities and supplies for cleaning must be made available.

Reassemble the face piece, replacing the filtering elements. Test the respirator to verify that all components work properly.

Note: Respirator must be thoroughly rinsed. Detergents or disinfectants on face piece may result in dermatitis and some disinfectants may cause the rubber to deteriorate or metal parts to corrode if not completely removed.

Repairs and Replacement Parts

Where air-purifying respirators are routinely used, filters and cartridges shall be replaced on a regular basis, when indicated by the end-of-service-life indicator, or when they are no longer effective. When filters become difficult to breathe through they shall be replaced. Where it is evident by odor or irritant properties that a contaminant has broken through the filtering parts, the chemical cartridges shall be replaced immediately.

Only persons appropriately trained to perform such operations, using parts designed for the particular respirator shall make repairs. No repairs shall be performed that are outside the manufacturer's recommendations concerning the type and extent of repairs that can be performed. Only the manufacturer or appropriately trained technician shall conduct repairs of reducing or admission valves on an SCBA.

Storage

Respirators shall be properly stored to protect against damage, contamination, excessive moisture, extreme temperatures, sunlight, and damaging chemicals. If cartridges are stored for reuse, they shall be stored in a zip-lock bag that is dated as to the first day of use of the cartridge.

Respirators shall be stored so that the facepiece and the elastomeric parts will rest in a normal position. Respirators shall be stored with the shield side down. Do not hang the respirator by its straps. This is to ensure that proper function will not be impaired by the distortion of the respirator or its straps.

RECORDKEEPING

Medical evaluations and fit testing records shall be established and maintained for every individual required to wear a respirator. Medical evaluation records shall also be maintained for individuals who wear elastomeric facepiece respirators.

The office of Emergency Preparedness shall establish and maintain accurate records according to OSHA 29 CFR 1910.20 (Access to Employee Exposure and Medical Records Standard) for each individual required to wear a respirator as a condition of his or her employment or study. This record shall include the following:

A. Name and job title of the respirator wearer;
B. University identification number;
C. A copy of any information provided to the physician; and,
D. The University's copy of the physician's written opinion on initial, periodic and special medical examinations.

This record shall be maintained for 30 years beyond the last date of employment for employees.

The medical evaluation shall be made available to that individual and to the IDOL in accordance with 29 CFR 1910.1020. An individual’s fit testing records shall also be made available to that person and IDOL. A “designated representative” as defined in 29 CFR 1910.1020(c)(3) may also have an individual’s medical or fit testing record made available to them.

Fit-testing records shall be kept until replaced by a more recent record. Records for substance-specific OSHA Standards shall be maintained according to the specific OSHA Standard.

Records on respirator inspection for positive pressure respirators (airline or SCBA) shall be maintained until replaced by a more recent inspection record. Records on maintenance

on a positive pressure respirator shall be maintained until the respirator is no longer in service.

PROGRAM EVALUATION

This Respiratory Protection Program will be reviewed annually by the Emergency Preparedness Manager. The written standard operating procedures specific to the departments utilizing respirators should be reviewed and updated by these areas at least annually and more frequently as hazards, tasks, procedures or equipment change.

APPENDIX 1 – Sample Standard Operating Procedure (SOP)

Benedictine University
Respiratory Protection Program
Respiratory Protection Standard Operating Procedures
For _____

It is the policy of the above-mentioned department to comply with the Benedictine University Respiratory Protection Program. The purpose of this document is to complement the Campus program with site-specific written standard operating procedures.

PROGRAM ADMINISTRATION

Benedictine University recognizes the fact that supervisors are not necessarily experts in the area of respiratory protection. However, it is the supervisor's responsibility to assure "that required equipment and personal protective devices are provided, maintained and used" by those supervised. The Emergency Preparedness Manager will assist supervisors and individuals in fulfilling these obligations upon request.

The following individual has responsibility for the administration of respiratory protection in the above-mentioned department. It is the responsibility of this person to supervise the use of respirators and to ensure that respirators are used when they are required and in a manner in which the wearer has been trained.

_____ _____
(Name) (Title)

PART I: LIST OF RESPIRATORS

Below is a list of information relating to respirators that are available for use by employees or students. [*Use Part II to indicate the unit selected and the respiratory hazard for which each respirator is selected*.]

Types of respirators include:

- Disposable dust/mist/fume masks,
- Half-mask negative-pressure respirator,
- Full facepiece negative-pressure respirator,
- Airline respirators (full or half-mask), and
- Self-contained breathing apparatus.

Types of filters/cartridges include:

- Dust/mist/fume filters (in combination with cartridges or stand alone)
- High efficiency particulate air (HEPA) filters (purple/magenta),
- Organic vapor (OV) cartridge (black),

- Acid gas cartridge (white),
- Combination OV and acid gas (yellow),
- Ammonia/methyl amine (green), or
- Other.

Types of air sources include:

- SCBA compressed air tank.
- Compressed air tanks for airline respirators, or compressor.

PART II: SELECTION

Respirator types selected for use (include manufacturer and model number):

_____

Cartridges and filters to be worn and hazard:

_____	_____
(Cartridge type or air source)	(Hazards)
_____	_____
(Cartridge type or air source)	(Hazards)

MEDICAL EVALUATIONS

A determination of the capability of each individual to physically and psychologically perform his or her normal work duties while wearing a respirator is made by a licensed physician from Concentra.

Copies of the Physician's Written Opinion stating that a licensed physician has determined an individual capable of wearing a respirator are found in the individual's personnel file in the Office of Emergency Preparedness.

RESPIRATOR TRAINING AND FIT TESTING

Records of training and fit testing for the individuals in this department who will be wearing respirators can be found in the Office of Emergency Preparedness.

INSPECTION AND MAINTENANCE OF RESPIRATORS

The employee wearing the respirator is responsible for the overall maintenance and inspection of the respirator they are using to perform the job duties.

APPENDIX 2 – How to Select the Correct Respirator

The type and brands of respirators vary widely ranging from simple dust masks to supplied air respirators like the kind firemen wear. Following is a description of the main types of respirators.

Dust Masks (filtering facepieces)

These simple, two-strap disposable dust masks are designed only for dusts. They are not as protective as other respirators, but do an adequate job in many cases, unless the dust is really toxic or copious. Don't confuse these two-strap masks with the less protective one-strap dust mask designed only for pollen or non-toxic dust.

Half-Face Air-Purifying Respirator

These respirators are sometimes called "half-face" or "half-mask" respirators since they cover just the nose and mouth. They have removable cartridges that filter out either dust, chemicals or both. Selecting the correct cartridges is essential since they are designed for particular types of chemicals or dust. A reputable respirator vendor can assist you in selecting the correct cartridges. These cartridges are typically removable and sometimes interchangeable. Cartridges are available for solvents, ammonia, chlorine, acids and other chemicals. The cartridges must be changed out or replaced periodically, especially

for chemicals, since they can absorb only so much contaminant before breakthrough occurs. A few cartridges are equipped with end-of-service indicators that show when a cartridge should be replaced. Most cartridges don't have this indicator and you must develop a change-out schedule to prevent breakthrough. The change-out schedule is based on the chemical concentration, physical work effort, temperature and humidity. Many respirator manufacturers have cartridge change schedule calculators available on the Internet.

Full-Face Air-Purifying Respirator

In some situations, you may need or want to use full-face respirators. This type of respirator is used when the air contaminant irritates the eyes. They also provide somewhat higher protection to the lungs since they tend to fit tighter and are less prone to leaking. These respirators also have replaceable cartridges that must be changed on a regular basis as described above for half-face respirators.

Powered Air Purifying Respirator (PAPR)

Powered Air Purifying Respirators have a battery pack that draws air through replaceable cartridges and blows into a full facepiece, helmet or hood. These respirators are often more comfortable in hot weather and some can provide more protection, depending on the type. The cartridges must be changed regularly as describe for half-face respirators above.

Airline Respirator

Tank-type respirator (SCBA)

Supplied Air Respirators and Self-Contained Breathing Apparatus (SCBA)

In a few situations, you may need to provide a supplied air respirator to your employees. These situations include large chemical spills or leaks, entering a confined space where there is lack of oxygen or high levels of air contaminants, or working around extremely toxic chemicals. They may also be necessary working at hazardous waste sites, during sandblasting or in some spray painting operations. “Supplied air,” means that clean air is provided by means of an air hose from a compressor or a pressurized air tank.

Supplied air respirators are required when a respiratory hazard is considered “immediately dangerous to life or health” (also called “IDLH”). Respiratory hazards are classified as IDLH as follows:

- There is a lack of oxygen (less than 19.5% oxygen)
- There is too much oxygen (more than 23.5% - a fire hazard)
- You know there are toxic chemicals in the air, but you don't know how much
- The amount of chemical in the air is known or expected to be above the IDLH level for that chemical. See the NIOSH Pocket Guide to Chemical Hazards for chemical IDLH levels.

Levels of chemicals above IDLH can occur in confined spaces, or enclosed spaces where there is little or no ventilation.

APPENDIX 3 – Sample Training Certificate

APPENDIX 4 – 29 CFR 1910.134

Occupational Safety and Health Administration
Respiratory Protection Standard
29 CFR 1910.134

A. Permissible practice.

1. In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used pursuant to the following requirements.

2. Respirators shall be provided by the employer when such equipment is necessary to protect the health of the employee. The employer shall provide the respirators, which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of a respiratory protective program, which shall include the requirements outlined in paragraph (b) of this section.

3. The employee shall use the provided respiratory protection in accordance with instructions and training received.

B. Requirements for a minimal acceptable program.

1. Written standard operating procedures governing the selection and use of respirators shall be established.

2. Respirators shall be selected on the basis of hazards to which the worker is exposed.

3. The user shall be instructed and trained in the proper use of respirators and their limitations.

4. [Reserved]

5. Respirators shall be regularly cleaned and disinfected. Those used by more than one worker shall be thoroughly cleaned and disinfected after each use.

6. Respirators shall be stored in a convenient, clean, and sanitary location.

7. Respirators used routinely shall be inspected during cleaning. Worn or deteriorated parts shall be replaced. Respirators for emergency use such as self-contained devices shall be thoroughly inspected at least once a month and after each use.

8. Appropriate surveillance of work area conditions and degree of employee exposure or stress shall be maintained.

9. There shall be regular inspection and evaluation to determine the continued effectiveness of the program.

10. Persons should not be assigned to tasks requiring use of respirators unless it has been determined that they are physically able to perform the work and use the equipment. The local physician shall determine what health and physical conditions are pertinent. The respirator user's medical status should be reviewed periodically (for instance, annually).

11. Respirators shall be selected from among those jointly approved by the Mine Safety and Health Administration and the National Institute for Occupational Safety and Health under the provisions of 30 CFR part 11.

C. Selection of respirators. Proper selection of respirators shall be made according to the guidance of American National Standard Practices for Respiratory Protection Z88.2-1969.

D. Air quality.

1. Compressed air, compressed oxygen, liquid air, and liquid oxygen used for respiration shall be of high purity. Oxygen shall meet the requirements of the United States Pharmacopoeia for medical or breathing oxygen. Breathing air shall meet at least the requirements of the specification for Grade D breathing air as described in Compressed Gas Association Commodity Specification G-7.1-1966. Compressed oxygen shall not be used in supplied-air respirators or in open circuit self-contained breathing apparatus that have previously used compressed air. Oxygen must never be used with air line respirators.

2. Breathing air may be supplied to respirators from cylinders or air compressors.

a. Cylinders shall be tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR Part 178).

b. The compressor for supplying air shall be equipped with necessary safety and standby devices. A breathing air-type compressor shall be used. Compressors shall be constructed and situated so as to avoid entry of

contaminated air into the system and suitable in-line air purifying sorbent beds and filters installed to further assure breathing air quality. A receiver of sufficient capacity to enable the respirator wearer to escape from a contaminated atmosphere in event of compressor failure, and alarms to indicate compressor failure and overheating shall be installed in the system. If an oil-lubricated compressor is used, it shall have a high-temperature or carbon monoxide alarm, or both. If only a high-temperature alarm is used, the air from the compressor shall be frequently tested for carbon monoxide to insure that it meets the specifications in paragraph (d)(1) of this section.

3. Air line couplings shall be incompatible with outlets for other gas systems to prevent inadvertent servicing of air line respirators with non-respirable gases or oxygen.

4. Breathing gas containers shall be marked in accordance with American National Standard Method of Marking Portable Compressed Gas Containers to Identify the Material Contained, Z48.1-1954; Federal Specification BB-A-1034a, June 21, 1968, Air, Compressed for Breathing Purposes; or Interim Federal Specification GG-B-00675b, April 27, 1965, Breathing Apparatus, Self-Contained.

E. Use of respirators.

1. Standard procedures shall be developed for respirator use. These should include all information and guidance necessary for their proper selection, use, and care. Possible emergency and routine uses of respirators should be anticipated and planned for.

2. The correct respirator shall be specified for each job. A qualified individual supervising the respiratory protective program usually specifies the respirator type in the work procedures. The individual issuing them shall be adequately instructed to insure that the correct respirator is issued.

3. Written procedures shall be prepared covering safe use of respirators in dangerous atmospheres that might be encountered in normal operations or in emergencies. Personnel shall be familiar with these procedures and the available respirators.

   a. In areas where the wearer, with failure of the respirator, could be overcome by a toxic or oxygen-deficient atmosphere, at least one additional man shall be present. Communications (visual, voice, or signal line) shall be maintained between both or all individuals present. Planning shall be such that one individual will be unaffected by any likely incident and have the proper rescue equipment to be able to assist the other(s) in case of emergency.

b. When self-contained breathing apparatus or hose masks with blowers are used in atmospheres immediately dangerous to life or health, standby men must be present with suitable rescue equipment.

c. Persons using air line respirators in atmospheres immediately hazardous to life or health shall be equipped with safety harnesses and safety lines for lifting or removing persons from hazardous atmospheres or other and equivalent provisions for the rescue of persons from hazardous atmospheres shall be used. A standby man or men with suitable self-contained breathing apparatus shall be at the nearest fresh air base for emergency rescue.

4. Respiratory protection is no better than the respirator in use, even though it is worn conscientiously. Frequent random inspections shall be conducted by a qualified individual to assure that respirators are properly selected, used, cleaned, and maintained.

5. For safe use of any respirator, it is essential that the user be properly instructed in its selection, use, and maintenance. Both supervisors and workers shall be so instructed by competent persons. Training shall provide the men an opportunity to handle the respirator, have it fitted properly, test its face-piece-to-face seal, wear it in normal air for a long familiarity period, and, finally, to wear it in a test atmosphere.

a. Every respirator wearer shall receive fitting instructions including demonstrations and practice in how the respirator should be worn, how to adjust it, and how to determine if it fits properly. Respirators shall not be worn when conditions prevent a good face seal. Such conditions may be a growth of beard, sideburns, a skullcap that projects under the facepiece, or temple pieces on glasses. Also, the absence of one or both dentures can seriously affect the fit of a facepiece. The worker's diligence in observing these factors shall be evaluated by periodic check. To assure proper protection, the facepiece fit shall be checked by the wearer each time he puts on the respirator. This may be done by following the manufacturer's facepiece fitting instructions.

b. Providing respiratory protection for individuals wearing corrective glasses is a serious problem. A proper seal cannot be established if the temple bars of eyeglasses extend through the sealing edge of the full facepiece. As a temporary measure, glasses with short temple bars or without temple bars may be taped to the wearer's head. Wearing of contact lenses in contaminated atmospheres with a respirator shall not be allowed. Systems have been developed for mounting corrective lenses inside full facepieces. When a workman must wear corrective lenses as part of the facepiece, the

facepiece and lenses shall be fitted by qualified individuals to provide good vision, comfort, and a gas-tight seal.

c. If corrective spectacles or goggles are required, they shall be worn so as not to affect the fit of the facepiece. Proper selection of equipment will minimize or avoid this problem.

F. Maintenance and care of respirators.

1. A program for maintenance and care of respirators shall be adjusted to the type of plant, working conditions, and hazards involved, and shall include the following basic services:

a. Inspection for defects (including a leak check)

b. Cleaning and disinfecting

c. Repair

d. Storage

2. Equipment shall be properly maintained to retain its original effectiveness.

a. All respirators shall be inspected routinely before and after each use. A respirator that is not routinely used but is kept ready for emergency use shall be inspected after each use and at least monthly to assure that it is in satisfactory working condition.

b. Self-contained breathing apparatus shall be inspected monthly. Air and oxygen cylinders shall be fully charged according to the manufacturer's instructions. It shall be determined that the regulator and warning devices function properly.

c. Respirator inspection shall include a check of the tightness of connections and the condition of the facepiece, headbands, valves, connecting tube, and canisters. Rubber or elastomer parts shall be inspected for pliability and signs of deterioration. Stretching and manipulating rubber or elastomer parts with a massaging action will keep them pliable and flexible and prevent them from taking a set during storage.

d. A record shall be kept of inspection dates and findings for respirators maintained for emergency use.

4. Routinely used respirators shall be collected, cleaned, and disinfected as frequently as necessary to insure that proper protection is provided for the

wearer. Respirators maintained for emergency use shall be cleaned and disinfected after each use.

5. Only experienced persons shall do replacement or repairs with parts designed for the respirator. No attempt shall be made to replace components or to make adjustment or repairs beyond the manufacturer's recommendations. Reducing or admission valves or regulators shall be returned to the manufacturer or to a trained technician for adjustment or repair.

    a. After inspection, cleaning, and necessary repair, respirators shall be stored to protect against dust, sunlight, heat, extreme cold, excessive moisture, or damaging chemicals. Respirators placed at stations and work areas for emergency use should be quickly accessible at all times and should be stored in compartments built for the purpose. The compartments should be clearly marked. Routinely used respirators, such as dust respirators, may be placed in plastic bags. Respirators should not be stored in such places as lockers or toolboxes unless they are in carrying cases or cartons.

    b. Respirators should be packed or stored so that the facepiece and exhalation valve will rest in a normal position and function will not be impaired by the elastomer setting in an abnormal position.

    c. Instructions for proper storage of emergency respirators, such as gas masks and self-contained breathing apparatus, are found in "use and care" instructions usually mounted inside the carrying case lid.

6. Identification of gas mask canisters.

    1. The primary means of identifying a gas mask canister shall be by means of properly worded labels. The secondary means of identifying a gas mask canister shall be by a color code.

    2. All who issue or use gas masks falling within the scope of this section shall see that all gas mask canisters purchased or used by them are properly labeled and colored in accordance with these requirements before they are placed in service and that the labels and colors are properly maintained at all times thereafter until the canisters have completely served their purpose.

3. On each canister shall appear in bold letters the following:

a. Canister for_____
(Name for atmospheric contaminant)

or

Type N Gas Mask Canister

b. In addition, essentially the following wording shall appear beneath the appropriate phrase on the canister label: "For respiratory protection in atmospheres containing not more than _____ percent by volume of _____."
(Name of atmospheric contaminant)

4. Canisters having a special high-efficiency filter for protection against radionuclides and other highly toxic particulates shall be labeled with a statement of the type and degree of protection afforded by the filter. The label shall be affixed to the neck end of, or to the gray stripe, which is around and near the top of, the canister. The degree of protection shall be marked as the percent of penetration of the canister by a 0.3-micron-diameter dioctyl phthalate (DOP) smoke at a flow rate of 85 liters per minute.

5. Each canister shall have a label warning that gas masks should be used only in atmospheres containing sufficient oxygen to support life (at least 16 percent by volume), since gas mask canisters are only designed to neutralize or remove contaminants from the air.

Each gas mask canister shall be painted a distinctive color or combination of colors indicated in Table I-1. All colors used shall be such that they are clearly identifiable by the user and clearly distinguishable from one another. The color coating used shall offer a high degree of resistance to chipping, scaling, peeling, blistering, fading, and the effects of the ordinary atmospheres to which they may be exposed under normal conditions of storage and use. Appropriately colored pressure sensitive tape may be used for the stripes.

TABLE I-1

Atmospheric contaminants Colors assigned (1)

To be protected against

Acid gases	White
Hydrocyanic acid gas	White with ½-inch green stripe completely around canister near the bottom
Chlorine gas	White with ½-inch yellow stripe completely around the canister near the bottom
Organic vapors	Black
Ammonia gas	Green
Acid gases and ammonia gases	Green with ½-inch white stripe completely around the canister near the bottom
Carbon Monoxide	Blue
Acid gases and organic vapors	Yellow
Hydrocyanic acid and chloropicrin vapor	Yellow with ½-inch blue stripe completely around the canister near the bottom
Acid gases, organic vapors, and ammonia gases	Brown
Radioactive materials, except tritium and noble gases	Purple (Magenta)
Particulates (dusts, fumes, mists, fogs, or smokes) in combination with any of the above gases or vapors	Canister color for contaminant, as designated above, with ½-inch gray stripe completely around the canister near the top.
All of the above atmospheric contaminants	Red with ½-inch gray stripe completely around the canister near the top.

(1) Gray shall not be assigned as a main color for a canister designed to remove acids or vapors

NOTE: Orange shall be used as a complete body, or stripe color to represent gases not included in this table. The user will need to refer to the canister label to determine the degree of protection the canister will afford.

(Approved by the Office of Management and Budget under control number 1218-0099)

[39 FR 23502, June 27,1974, as amended at 43 FR 49748, October 24, 1978;49 FR 5322, February 10, 1984; 49 FR 18295, April 30, 1984; 58 FR 35309, June 30, 1993]

APPENDIX 5 – Voluntary Respirator Use

Benedictine University
Respiratory Protection Program
Information for Individuals Using Respirators When Not Required

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.

I have received and read this form and understand my responsibilities.

_____	_____	_____	_____
User's Signature	Date	Supervisor's Signature	Date

APPENDIX 6 – Assigned Protection Factors (APF)

Type of Respirator[1][2]	Quarter Mask	Half Mask	Full Facepiece	Helmet/Hood	Loose-Fitting Facepiece
1. Air-Purifying Respirator	5	10[3]	50	____	____
2. Powered Air-Purifying Respirator (PAPR)	____	50	1,000	25/1,000[4]	25
3. Supplied-Air Respirator (SAR) or Airline Respirator					
Demand mode	____	10	50	____	____
Continuous flow mode	____	50	1,000	25/1,000[5]	25
Pressure-demand or other positive-pressure mode	____	50	1,000	____	____
4. Self-Contained Breathing Apparatus (SCBA)					
Demand mode	____	10	50	50	____
Pressure-demand or other positive-pressure mode (i.e., open/closed circuit)	____	____	10,000	10,000	____

[1] Employers may select respirators assigned for use in higher workplace concentrations of a hazardous substance for use at lower concentrations of that substance, or when required respirator use is independent of concentration.

[2] The assigned protection factors are only effective when the employer implements a continuing, effective respirator program as required by this section (29 CFR 1910.134), including training, fit testing, maintenance, and use requirements.

[3] The APF category includes filtering facepieces, and half masks with elastomeric facepieces.

[4] The employer must have evidence provided by the respirator manufacturer that testing of these respirators demonstrates performance at a level of protection of 1,000 or greater to receive an APF of 1,000. This level of performance can best be demonstrated by performing a WPF or SWPF study or equivalent testing. Absent such testing, all other PAPRs and SARs with helmet/hoods are to be treated as loose-fitting facepiece respirators, and receive an APF of 25.

[5] The employer must have evidence provided by the respirator manufacturer that testing of these respirators demonstrates performance at a level of protection of 1,000 or greater to receive an APF of 1,000. This level of performance can best be demonstrated by performing a WPF or SWPF study or equivalent testing. Absent such testing, all other PAPRs and SARs with helmet/hoods are to be treated as loose-fitting facepiece respirators, and receive an APF of 25.

APPENDIX 7 – CONCENTRA AUTHORIZATION FOR EXAMINATION OR TREATMENT AND EMPLOYER SERVICES PATIENT INFORMATION

Concentra™

(Patient must present Authorization and Photo ID at the time of service.)

Authorization for Examination or Treatment

Patient Name:_____ Social Security Number:_____

Employer:_____ Date of Birth:_____

Street Address:_____ Location Number:_____

Temporary Staffing Agency:_____

Work Related

❑ Injury ❑ Illness

Date of Injury_____

Substance Abuse Testing★ (check all that apply)

❑ Regulated drug screen ❑ Breath alcohol

❑ Collection only ❑ Hair collect

❑ Non-regulated drug screen ❑ Rapid drug screen

❑ Other_____

Type of Substance Abuse Testing

❑ Preplacement ❑ Reasonable cause

❑ Post-accident ❑ Random

❑ Follow-up

Special instructions/comments:

Physical Examination

❑ Preplacement ❑ Baseline ❑ Annual ❑ Exit

DOT Physical Examination

❑ Preplacement ❑ Recertification

Special Examination

❑ Asbestos ❑ Respirator ❑ Audiogram

❑ Human Performance Evaluation★

❑ HAZMAT ❑ Medical Surveillance

❑ Other_____

Billing (check if applicable)

❑ Employee to pay charges

★ Due to the nature of these specific services, only the patient and staff are allowed in the testing/treatment area. Please alert your employee so that they can make arrangements for children or others that might otherwise be accompanying them to the medical center.

Authorized by:_____ Title:_____

Please print

Phone:_____ _____

Date

Concentra now offers urgent care services for non-work related illness and injury. We accept many insurance plans.

(Copies of this form are available at www.concentra.com)

Concentra®

Employer Services Patient Information

About You
Reason for Today's Visit

☐ Injury care ☐ Physical exam ☐ DOT (CDL) certification ☐ Drug screen ☑ Other: _____

Social security number or Military DBN: _____ Date of birth (MM/DD/YYYY): _____

Last name: _____ First name: _____ Middle initial: ____

Address: _____ Apartment number: ____ City: _____ State: ____ ZIP: ____

Home phone: _____ Work phone: _____ Cell phone: _____

☐ Male ☐ Female ☐ Single ☐ Married

Email address: _____ Concentra may send a detailed email: ☐ Yes ☐ No

For security of your records, all emails containing protected health information (PHI) are sent encrypted.

About Your Employer
Employer Requesting Services

Company name: _____ Location/store number: _____

Address: _____ Suite number: _____ City: _____ State: _____ ZIP: _____

Is your employment arranged through a temporary hire agency? ☐ Yes ☐ No

Name of agency: _____ Agency phone: _____

Notice of Privacy Practices

Your name and signature below indicates that you have been made aware of Concentra's Notice of Privacy Practices (NOPP) on the date indicated. You understand that the NOPP is posted in the center and a copy will be provided to you if you request it. If this is your first date of service with Concentra, please indicate this to the front desk receptionist and he/she will provide you a copy of the NOPP. If you have any questions regarding the information in Concentra's Notice of Privacy Practices, contact Concentra's Privacy Office at 800-819-5571 or privacyoffice@concentra.com.

Name: (please print) _____ Date notice received: _____

Signature: _____ Date: _____

Consent

(If you are ONLY here for a Department of Transportation drug screen or breath alcohol test, skip this section. For all other services, please complete.)

The information provided is correct to the best of my knowledge. I will not hold Concentra, its health provider, or its employees responsible for any errors or omissions that I may have made in completing the information on this form.

Signature: _____ Date: _____

I give permission to Concentra to perform the following services that the physicians and other non-physician providers and assistants may deem to be necessary: (a) medical, surgical, and diagnostic (e.g., including but not limited to x-rays, blood draws, and laboratory tests) processes, treatments, and procedures; (b) administration of injections, medications, and immunizations (with immunizations to occur after my receipt of any applicable vaccine information statements ("VIS" or "VISs"); and (c) completion of medically appropriate tests for communicable and other diseases.

Signature: _____ Date: _____

APPENDIX 8 – OSHA RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE

OSHA RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE

Date:	**Chart #:**
Age **Sex:**	**SSN:**
Name:	**Job Title:**
Employer Name:	**Department:**

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. However, it does require that a Physician or Licensed Health Care Professional (PLHCP) review this questionnaire and answer any questions you may have concerning the questions asked in this questionnaire.

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.

TO THE PHYSICIAN OF OTHER LICENSED HEALTH CARE PROFESSIONAL (PLHCP)

Review Part A Sections 1 and 2. When an employee answers YES to any of the questions in Section 2 and the questionnaire is not administered in conjunction with a physical examination, the employee needs to be considered for a follow-up physical examination with particular emphasis on those areas in which the employee answered YES. When an employee answers YES to any of the questions in Section 2 and this questionnaire is completed in conjunction with a physical examination, the physician will place particular emphasis upon those areas to which the employee answered YES. In either situation the PLHCP will complete the "PLHCP's Written Statement" to both the employee and employer **within 2 days.**

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. Your height: _____ ft. _____ in.
2. Your weight: _____ lbs.
3. Your job title: _____
4. A phone number where you can be reached by the health care professional who will review this questionnaire (include area code):_____
5. The best time to phone you at this number is: _____ am/ _____ pm.
6. Has your employer told you how to contact the health care professional who will review this questionnaire? (circle one): Yes No
7. 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).
8. Have you worn a respirator (circle one): Yes No
   If "Yes", what type(s): _____

TO BE FILED IN EMPLOYEE'S MEDICAL FILE

OSHA RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE

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

2. **Have you ever had any of the following conditions?**
   - Yes No 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

3. **Have you ever had any of the following pulmonary or lung problems?**
   - Yes No 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

4. **Do you currently have any of the following symptoms of pulmonary or lung disease?**
   - Yes No a. Shortness of breath
   - Yes No b. Shortness of breath when walking 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

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

Yes No 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
Yes No g. High blood pressure
Yes No h. Any other heart problem that you've been told about

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

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

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

Yes No a. Breathing or lung problems
Yes No b. Heart trouble
Yes No c. Blood pressure
Yes No d. Seizures (fits)

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

Yes No 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 problems that interfere with your use of a respirator

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

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

10. Yes No Have you ever lost vision in either eye (temporarily or permanently)

11. Yes No Do you currently have any of the following vision problems?

Yes No a. Wear contact lenses
Yes No b. Wear glasses
Yes No c. Color blindness
Yes No d. Any other eye or vision problems

TO BE FILED IN EMPLOYEE'S MEDICAL FILE

12. Yes No **Have you ever had an injury to your ears, including a broken ear drum?**

13. **Do you currently have any of the following hearing problems?**
- Yes No a. Difficulty hearing
- Yes No b. Wear a hearing aide
- Yes No c. Any other hearing or ear problems

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

15. **Do you currently have any of the following musculoskeletal problems?**
- Yes No 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.

TO THE PLHCP

Check ✓ the ONE that applies

☐ I have reviewed Part A Section 2 of this questionnaire with the employee and I do not recommend that a physical examination be performed.

☐ I have reviewed Part A Section 2 of this questionnaire with the employee and I am recommending that a physical examination be performed.

☐ I have reviewed Part A section 2 of this questionnaire without the employee and I do not recommend that a physical examination be performed.

☐ I have reviewed Part A Section 2 of this question without the employee and I am recommending that a physical examination be performed.

PLHCP Signature

Employee Signature
(When Available)

Date

TO BE FILED IN EMPLOYEE'S MEDICAL FILE

OSHA RESPIRATOR MEDICAL EVALUATION QUESTIONNAIRE

PART B of this OSHA Questionnaire is discretionary. The health care professional who will be reviewing this questionnaire will determine if this part needs to be completed by the employee.

Part B (DISCRETIONARY)

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. Yes No **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 are working under these conditions?
2. Yes No **At work or at home, have you ever been exposed to hazardous solvents, hazardous airborne chemicals (for example: gases, fumes, or solvents)?**
   If "Yes", name the chemicals if you know them: _____
   _____
3. **Have you ever worked with any of the materials, or under any of the conditions, listed below:**
   Yes No Asbestos
   Yes No Silica (for example: sandblasting)
   Yes No Tungsten/Cobalt (for example: grinding or welding this material)
   Yes No Beryllium
   Yes No Aluminum
   Yes No Coal (for example; mining)
   Yes No Iron
   Yes No Tin
   Yes No Dusty Environments
   Yes No Any other hazardous exposures
   If "Yes", describe these exposures: _____
   _____
4. **List any second jobs or side businesses you have:** _____
   _____
5. **List your previous occupations:** _____
   _____
6. **List your current and previous hobbies:** _____
   _____
7. **Yes No Have you been in the military services?**
   If "Yes", were you exposed to biological or chemical agents (either in training or combat)
   Yes No
8. **Yes No Have you ever worked on a HAZMAT team?**
9. **Yes No 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)**
   If "Yes", name the medications if you know them: _____

TO BE FILED IN EMPLOYEE'S MEDICAL FILE

10. **Will you be using any of the following items with your respirator:**
    Yes No a. HEPA Filters
    Yes No b. Canisters (for example; gas masks)
    Yes No c. Cartridges

11. **How often are you expected to use the respirator(s) (circle "yes" or "no" for all answers that apply to you)**
    Yes No a. Escape only (no rescue)
    Yes No b. Emergency Rescue only
    Yes No c. Less than 5 hours per week
    Yes No d. Less then 2 hours per day
    Yes No e. 2 to 4 hours per day
    Yes No f. Over 4 hours per day

12. **During the period you are using the respirator(s), is your work effort:**
    Yes No a. Light (less than 200 kcal per hour)
    Examples of light work are sitting while writing, drafting, or performing light assembly work; or standing while operating a drill press (1-3 lbs.) or controlling machines.
    If "Yes", how long does this period last during the average shift: _____hrs. _____mins.
    Yes No b. Moderate (200 to 350 kcal per hour)
    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.
    If "Yes", how long does this period last during the average shift:_____hrs. _____mins.
    Yes No c. Heavy (above 350 kcal per hour)
    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.)
    If "Yes", how long does this period last during the average shift:_____hrs. _____mins.

13. Yes No **Will you be wearing protective clothing and/or equipment (other than the respirator) when you're using your respirator.**
    If "Yes", describe this protective clothing and/or equipment
    _____

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

15. Yes No **Will you be working under humid conditions**

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:**

Name of first toxic substance: _____
Estimated maximum exposure per shift: _____
Duration of exposure per shift: _____
Name of second toxic substance: _____
Estimated maximum exposure per shift: _____
Duration of exposure per shift: _____
Name of third toxic substance: _____
Estimated maximum exposure per shift: _____
Duration of exposure per shift: _____
Name of any other toxic substances that you'll be exposed to while using your respirator(s):
_____
_____

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

_____
_____

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

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 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 represent 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 respirator 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, fumes, 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.