Respiratory Protection Program

1 Introduction

Minnesota has adopted the Occupational Safety and Health Administration (OSHA) Respiratory Protection Standard 29 CFR 1910.134[1]. This standard requires employers to develop and implement a written respiratory protection program with required worksite-specific procedures and elements to protect all employees who are required to wear an air-purifying respirator to complete their job duties. It also requires employers to ensure that any employee who is voluntarily using an elastomeric tight-fighting respirator is medically able to use that respirator, and that the respirator is cleaned, stored, and maintained so that its use does not present a health hazard to the user. Employers are not required to include in a written respiratory protection program for those employees whose only use of respirators involves the voluntary use of filtering facepieces (dust masks). Respiratory protection is necessary in situations where engineering and administrative controls are insufficient to reduce airborne hazards, in situations in which engineering and other controls are being installed or maintained, in oxygen deficient atmospheres, in emergencies, or for internal structural firefighting.

The following St. Olaf Respiratory Protection Program follows guidance found in the OSHA Small Entity Compliance Guide for the Respiratory Protection Standard[2] and OSHA Standard Interpretations[3,4], borrows wording and images from the Minnesota Department of Administration Respiratory Protection Program[5], the University of Minnesota Respiratory Protection Program[6], and Northwestern University Respiratory Protection Program[7], and has been tailored to fit the needs of St. Olaf College. The St. Olaf Respiratory Protection Program (RPP) can be downloaded as a pdf from the RPP webpage[8], obtained from the Environmental Health and Safety (EHS) Office, or requested from an employee's supervisor.

2 Statement of Policy

2.1 Contact Information.

(a) Issuing Authority: Vice President and Chief Financial Officer

(b) Contact: Elisabeth Haase; Department of Environmental Health and Safety; haase2@stolaf.edu; 507-786-2292

(c) Last Updated: 02/29/2023

2.2 St. Olaf College is committed to maintaining a safe and healthy work environment.

This written Respiratory Protection Program is intended to:

(a) Prevent occupational disease caused by breathing air contaminated with harmful (i.e., above exposure levels) dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors. This prevention 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). Respirators will be used when engineering controls are not feasible, or in emergency situations.

(b) Ensure that employees who are required to wear respirators are medically able to use that respirator, and are using and maintaining the respirators properly.

(c) Ensure that employees who are voluntarily using a tight-fitting elastomeric respirator (e.g., to decrease nuisance odors) are medically able to use that respirator, and are using and maintaining the respirator properly.

2.3 Respiratory Protection Program. The RPP is a key element to assist St. Olaf College in the protection of College employees. It also assists St. Olaf College in ensuring compliance with the OSHA Respiratory Protection Standard[1]. This RPP includes:

(a) Voluntary Use.
(b) Hazard Evaluation.
(c) Respirator Selection.
(d) Medical Evaluation.
(e) Respirator Fit Testing.
(f) Employee Training.
(g) Respirator Use.
(h) Record Keeping Program Evaluation.
(i) Program Evaluation.

2.4 Accessibility of the RPP.

(a) Per 29 CFR 1910.134(m)(4)[1], St. Olaf employees have ready access to a variety of internet-connected computers in their work areas where they can access and read the St. Olaf RPP webpage and the RPP.
(b) Employees can access this website 24/7, every day of the year. If they desire a hard copy of the RPP but cannot access a printer, they may request one from their supervisor or EHS.
(c) Within 24 hours of receiving the request, excluding non-workdays, the supervisor or EHS will provide a hard copy to the employee.

3 Scope and Application

3.1 Mandatory Use.

(a) This program applies to all St. Olaf College personnel (staff, faculty, and students) who are required to wear respirators to complete work-related tasks. The use of a respirator may be required for one of the following reasons:

(1) Personnel have an exposure to a respiratory hazard that is above a relevant exposure limit.
(2) A qualified safety professional or medical personnel determines respiratory protection is required, regardless of exposure.
(3) Supervisors or principal investigators choose to require the use of respiratory protection regardless of exposure level.
(4) A chemical label or Safety Data Sheet specifically requires the use of respiratory protection for the activity being performed.

(b) The College will provide medical evaluations, respirators, fit testing, and training at no cost to St. Olaf College personnel who are required to wear a respirator.

3.2 Voluntary Use.

(a) Under some circumstances St. Olaf College employees may wish to use respiratory protection equipment for their own comfort or sense of well-being, even when there is no recognized respiratory hazard or overexposure. Respirator use in these circumstances would be considered "voluntary use" and many elements of OSHA's respiratory protection standard do not apply. See sections 6 and 9.1(b) for additional details.

(b) Voluntary users must obtain permission from their supervisor and EHS to use a respirator. The College will provide fit testing and training at no cost to ensure proper use.

(c) If an N95 Filtering Facepiece (FFP) respirator is used by employees in areas that have no respiratory hazards, the College is not required to include these employees in the RPP. The employee's supervisor and EHS must, however, determine that such respirator use will not in itself create a hazard (i.e., by ensuring that masks are not used if dirty or contaminated, and that their use does not interfere with the employee's ability to work safely).

(d) Employees who are voluntarily using tight-fitting elastomeric respirators (see Appendix B for examples) are required to have a medical evaluation performed by a physician or licensed health care professional (PLHCP) at their own cost to ensure that they are medically able to use that respirator.

3.3 Respirators for Emergency Use.

(a) The College does not maintain respirators for use in emergency situations or as emergency escape-only situations because the campus facilities, work conditions, and emergency response plans are designed to avoid such situations. No individual is to knowingly work in an area that is, or is suspected of being, immediately dangerous to life and health (IDLH).

3.4 Respirators for Contractors.

(a) This program does not apply to contractors; they should refer to their company's Respiratory Protection Program.

4 Definitions

Acronyms found in this written plan:

CDC: Centers for Disease Control and Prevention
CHO: Chemical Hygiene Officer
ECP: Exposure Control Plan
ERTK: Employee Right To Know Act
EHS: Environmental Health and Safety
FFP: Filtering Facepiece respirator
IDLH: Immediately Dangerous to Life and Health
HR: Human Resources
NIOSH: National Institute for Occupational Safety and Health
OSHA: Occupational Safety and Health Administration
PPE: Personal Protective Equipment
PLHCP: Physician or Licensed Health Care Professional
REL: Recommended Exposure Limit
RPP: Respiratory Protection Program
TLV: Threshold Limit Value

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

Assigned Protection Factor (APF). The workplace level of respiratory protection that a respirator or class of respirators is expected to provide to employees when the employer implements a continuing, effective respiratory protection program as specified by this section.

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

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.

Elastomeric Tight-Fitting Respirator. A tight-fitting, air-purifying respirator with replaceable filters, cartridges, or canisters. The design of elastomeric respirators is such that the filtering medium is not the only fundamental part needed to make the facepiece functional. The elastomeric (e.g., rubber, silicone, neoprene, plastic) material allows the respirator to be cleaned, and reused. Elastomeric respirators can be used for many gases and vapors if equipped with the proper cartridges.

Escape-Only Respirator. A respirator intended to be used only for emergency exit.

Filtering Facepiece (FFP) Respirator ("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.

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)

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

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 escape from a dangerous atmosphere.

Loose-Fitting Facepiece. A respiratory inlet covering that is designed to form a partial seal with the face.

Negative Pressure Respirator (Tight-Fitting). A respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

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, some or all of the health care services required by paragraph (e) of this section.

Positive Pressure Respirator. A respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

Powered Air-Purifying Respirator (PAPR). An air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Recommended Exposure Limit (REL). The name used by NIOSH)for the occupational exposure limits it recommends to protect workers from hazardous substances and conditions in the workplace. RELs are not regulations.

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.

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

Threshold Limit Value (TLV). Refer to airborne concentrations of chemical substances and represent conditions under which it is believed that nearly all workers may be repeatedly exposed, day after day, over a working lifetime, without adverse effects.

Tight-Fitting Facepiece. A respiratory inlet covering that forms a complete seal with the face.

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

5 Responsibilities (Program Administration)

5.1 Human Resources.

(a) Compile (with input from EHS and the departments) the names of all College employees who, because of the nature of their jobs, are included under the RPP.

(b) Work with the EHS Training Coordinator to implement the training matrix/assignment database to ensure that employees are assigned all required and relevant training.

(c) Maintain the database of records of medical evaluations, fit testing, and training.

(d) Coordinate and oversee the medical evaluation component of the RPP to ensure that employees who are using a tight-fitting respirator are medically able to use that respirator.

(1) Provide a copy of the RPP to the physician or licensed health care professional (PLHCP) who will be conducting the medical evaluation.

(2) Receive a written (faxed) copy of the recommendation(s) of the PLHCP.

(3) Additional fit testing will occur if the conditions of 10.1(f) have been met.

5.2 Environmental Health and Safety.

(a) The **EHS Director** is the **RPP Coordinator** and has overall responsibility for the RPP.

(b) Work with potentially affected employees and their supervisors to conduct workplace hazard evaluations (Section 7) to identify situations where respiratory protection will be required, and identify which employees will need respiratory protection.

(c) Together with Facilities, and the employee's supervisor, make all practical efforts to ensure that engineering or other controls are available and implemented to eliminate the need for respiratory protection.

(d) With input from the employee's supervisor, designate respirator use as mandatory or voluntary use.

(e) Assist the employee and employee's supervisor in selecting the appropriate NIOSH-approved respirator, cartridges, and filters based upon the hazard assessment and workplace conditions, and in determining the service life of cartridges and filters.

(f) Review, evaluate, and update (if necessary) the RPP every two years.

(g) The **Chemical Hygiene Officer** (CHO), who has received the necessary training from 3M, will:

(1) Conduct fit testing for respirator users.

(2) Provide initial, annual, and additional training and information to the respirator users.

(3) Provide consultation and guidance as necessary.

5.3 Department Directors, Supervisors, and Managers.

Primary responsibility for ensuring that St. Olaf personnel follow the appropriate RPP safety guidelines falls to the various directors, managers, and supervisors who promote, encourage, and exemplify a culture of safety for their personnel to emulate during everyday work activities. **These leaders shall:**

(a) Work with potentially affected personnel and EHS to conduct workplace hazard evaluations (Section 7) to identify situations where respiratory protection will be required, and identify which employees will need respiratory protection.

(b) Send to HR the names of employees who will need respiratory protection, including information regarding the respirator selected for use (HR needs this information to pass along to the PLHCP).

(c) Ensure that employees who are required to wear respirators have received a medical evaluation, training, and annual fit test prior to respirator use.

(d) Inform and consult with HR and EHS if additional fit testing is required due to the conditions of 10.1(f).

(e) Purchase NIOSH-approved respirators for designated personnel; replace as needed. Supply NIOSH-approved replacement filters, cartridges, or canister elements as needed.

(f) Ensure that respirator users are properly using and maintaining their respirators according to Section 12.

(g) Remove respirators from service when the inspection, maintenance, or user identifies any unsafe condition.

(h) Ensure all filters, cartridges, and canisters are labeled and color-coded with the NIOSH approval label; verify the label has not been removed and remains legible; and confirm the correct cartridge is used for each task (see Appendix B, Table 2).

(i) Contact EHS to evaluate any safety concerns.

5.4 Employees shall:

(a) Participate in all required training, medical evaluations, fit testing, and other program activities.

(b) Inspect the respirator before each use (Section 12.4) and report any damage or malfunctions to their supervisor; remove the respirator from service or discard.

(c) Wear the respirator appropriately when required, including performing a user seal check (Section 12.3) each time a tight-fitting respirator is donned, and ensuring that facial hair, eyeglasses, etc. do not interfere with a proper seal.

(d) Store, clean, and maintain the respirator.

(e) Promptly report to your supervisor the following:

(1) Any symptoms of illness that may be related to respirator usage or exposure to hazardous atmospheres.

(2) Any changes in the workplace that may require re-evaluation of respirator use.

(3) Any changes of health status that affect the ability to safely wear a respirator.

6 Voluntary Use

6.1 Under some circumstances employees may wish to use respiratory protection equipment for their own comfort or sense of well-being, even when there is no recognized hazard or overexposure.

(a) Respirator use in these circumstances would be considered "voluntary use" and many elements of OSHA's respiratory protection standard would not apply.

(b) For voluntary users, annual respirator fit testing is not required; however, EHS recommends initial fit testing to help ensure proper size selection.

(c) Voluntary users must recognize that if the respirator is used improperly or not kept clean, the respirator itself can become a hazard to the user.

(d) The employee's supervisor and EHS will determine if such respirator use will not in itself create a hazard (i.e., by ensuring that masks are not used if dirty or contaminated, and that their use does not interfere with the employee's ability to work safely). Only then will an employee be allowed to use a respirator under voluntary use conditions.

6.2 If an employee wants to wear a filtering facepiece (FFP) respirator, they must:

(a) Obtain permission from their supervisor and EHS to use a respirator. EHS will visit with the employee to better understand the situation, ensure that all air quality control measures are working properly, and help develop the best remediation plan.

(b) Read and understand the information contained in this program.

(c) Read and sign the form found in Appendix A ("Voluntary Use of Respirator"). This is form is required as per 29 CFR 1910.134.

(d) Report any problems to their supervisor.

6.3 If an employee wants to wear a tight-fitting respirator (which may create a strain on the body because of increased breathing resistance or other effects), they must:

(a) Obtain permission from their supervisor and EHS to use a tight-fitting respirator. EHS will visit with the employee to better understand the situation, ensure that all air quality control measures are working properly, and help develop the best remediation plan.

(b) Read and understand the information contained in this program.

(c) Complete a medical evaluation and obtain the approval of their physician or licensed health care professional (PLHCP) to ensure that the employee is not likely to be harmed by wearing the respirator. The medical evaluation and physician's approval forms will be provided to the employee by HR.

(d) Receive Voluntary Use Training.

(e) Fit testing is not required.

6.4 If an employee wants to wear a KN95 or KF94 respirator:

(a) OSHA does NOT consider a KN95 or KF94 mask to be a tight-fitting negative-pressure filtering facepiece respirator since it has not been certified by NIOSH.

(b) Such a respirator can NOT be worn in workplace settings that require the use of a tight-fitting, negative-pressure filtering facepiece respirator.

(c) In a workplace setting where an employee may voluntarily use a respirator, a KN95 or KF94 respirator may be used.

(1) A medical evaluation is not required.

(2) Training is not required.

(3) Fit testing is not required.

(4) Appendix A ("Voluntary Use of Respirator") of 29 CFR 1910.134 will be provided.

7 Hazard Evaluation

7.1 Workplace Conditions. EHS personnel will work with supervisors and employees to identify situations where respiratory protection may be required based on professional judgment, prior experience, materials being used, or other considerations. If supervisors or employees have respiratory protection concerns then they should contact EHS.

(a) The departments of EHS and Facilities, along with the employee's supervisor, will make all reasonable efforts to ensure that engineering or other controls are available and implemented to eliminate the need for respiratory protection.

(b) Certain situations and operations (e.g., mold remediation) may require the use of respirators even if exposure levels are considered below the applicable permissible exposure limit, or if an exposure limit does not exist.

(c) Designation of Mandatory vs Voluntary Use. Respiratory protection will be designated by EHS as either mandatory or voluntary use. For example, if a St. Olaf person wants to use a respirator because of odor or irritation associated with a particular chemical, even though the exposure is well below all applicable exposure limits, or if the individual wants to use a respirator for their own comfort or sense of well-being, then the use of a respirator is designated as voluntary use.

7.2 Exposure Limits. In the absence of a regulatory exposure limit, commonly accepted guidelines (i.e., TLVs, RELs, or manufacturers' suggested exposure limits) will be used to evaluate the exposure hazard from a particular operation or environment.

(a) Airborne concentrations of hazardous agents may be predicted on the basis of past experience, mathematical calculations, published results for similar work, or actual air sampling.

(b) Predicted airborne concentrations will be extended to all members of the same job title or function unless specific information indicates that exposures vary substantially, in which case more cross-sectional data will be obtained.

(c) Where air sampling is needed, measurements will be made with calibrated equipment operated by trained safety and health personnel from, or under the direction of, EHS.

(d) Monitoring will be repeated when changes occur that could render respiratory protection equipment inadequate, or when changes in job tasks require new employees to be included in this RPP.

8 Respirator Selection

8.1 EHS will assist in selecting the appropriate respirator, cartridges, and filters based upon the hazard assessment and workplace conditions.

(a) Respirators must be NIOSH-certified and must be used in compliance with the conditions of its certification.

(b) Respirators with the designation KN95 or KF94 are not NIOSH-certified and are not allowed to be used in work settings that require respiratory protection.

(c) Respirators will be chosen from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user.

(d) Mandatory Use. Employees who are required to wear a respirator will have it provided to them at no cost by their department. The respirator will be clean, sanitary, and in good working order.

(e) Voluntary Use. Voluntary users may supply their own respirator provided that it is approved for use by EHS, and the employee's supervisor and EHS determines that such respirator use will not in itself create a hazard (i.e., by ensuring that masks are not used if dirty or contaminated, and that their use does not interfere with the employee's ability to work safely).

(1) Employees who are voluntarily using tight-fitting elastomeric respirators are required to have a medical evaluation performed by a physician or licensed health care professional (PLHCP) at their own cost to ensure that they are medically able to use that respirator.

(2) Respirators may be provided by the employee's supervisor upon request.

(f) Appendix B contains a respirator selection guide (Table 1) and a cartridge selection guide (Table 2).

8.2 Use of Cartridges.

(a) Cartridges used for the protection from gases or vapors must have an End of Service Life Indicator (ESLI) if available. If no ESLI is available, then a written change schedule must be developed to ensure cartridges are discarded before they lose their effectiveness. EHS will assist in determining a change-out schedule for cartridges.

(b) Some cartridge change-out schedules are provided in Section 12.6.

9 Medical Evaluation

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

(a) For employees who are required to wear respirators:

(1) Human Resources shall coordinate with a College-provided physician or licensed health care professional (PLHCP), or the employee's personnel PLHCP, who will conduct a medical evaluation and provide a written recommendation regarding the employee's ability to safely use a respirator.

(2) All costs of the medical evaluation, including any follow-up evaluation required by the PLHCP, will be paid by the employee's department.

(b) Voluntary users of FFP respirators are exempt from the medical evaluation requirement.

(c) Voluntary users of tight-fitting elastomeric respirators are required to have a medical evaluation since the use of such respirators may create a strain on the body because of increased breathing resistance or other effects. Medical costs for voluntary users are not covered by the College.

(d) The medical evaluation will begin with a medical questionnaire (Appendix C1) that is filled out by the employee, and will be administered in a manner that ensures the employee understands its content.

(e) The following information is included on the medical questionnaire to assist the PLHCP in making a recommendation concerning the employee's ability to use a respirator:

(1) The type of respirator to be used.
(2) The duration and frequency of respirator use.
(3) The expected physical work effort.
(4) Additional protective clothing and equipment to be worn.
(5) Temperature and humidity extremes that may be encountered.

(f) The written recommendation of the PLHCP (Appendix C2) will provide *only* the following information:

(1) Any limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator.
(2) The need for any follow-up medical tests, consultations, or diagnostic procedures (such as a pulmonary function test) that the PLHCP deems necessary to make a final determination.
(3) A statement that the PLHCP has provided the employee with a recommendation.

(g) The PLHCP's recommendation, along with any follow-up medical evaluations, must be obtained by HR prior to fit-testing and respirator use.

9.2 Confidentiality and Employee Questions.

(a) The medical questionnaire and all examinations shall be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire shall be administered in a manner that ensures that the employee understands its content.

(b) The employee will have the opportunity to discuss the medical evaluation results with the PLHCP.

9.3 Future/Additional Medical Evaluations.

(a) Medical evaluations may be required annually at the discretion of the PLHCP.

(b) The College will provide additional medical evaluations to employees who are required to wear a respirator if:

(1) A user reports medical signs or symptoms that are related to the user's ability to use a respirator.
(2) A PLHCP, supervisor, or EHS determines that the user needs to be reevaluated.
(3) Information from this program, including observations made during fit testing and program evaluation, indicate a need for reevaluation.
(4) A change occurs in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on the user.

(c) Medical evaluations for users of tight-fitting elastomeric respirators are to occur according to the following recommendations or more frequently if there is a change in health history:

Age	Light to Moderate Work	Strenuous Work with a SCBA
< 35 years	Every 3 years	Every 3 years
35 – 45 years	Every 2 – 3 years	Every 1 – 2 years
> 45 years	Every 2 years	Every year

10 Fit Testing

10.1 Fit test requirements for employees who are required to wear a respirator:

(a) Will be completed only after medical approval is received.
(b) Will occur prior to the initial time when the employee uses the respirator in the workplace, and annually thereafter.
(c) Will be completed with the same respirator (i.e., the same make, model, style, and size) that will be used during the work activities.
(d) Employees must be clean-shaven to be fit tested with a respirator that is designed to fit tight to the face (i.e., half and full-face respirators, and required use of FFP respirators).
(e) If proper fit is not able to be achieved for any reason, including cultural/religious practices, reasonable accommodations may be made in consultation with EHS, HR, and other appropriate College departments.
(f) Additional fit testing will happen when any of the following occur:

(1) When a different respirator (i.e., make, model, style, or size) is used.
(2) If requested by the employee.
(3) Whenever the employee reports, or the employer, PLHCP, supervisor, or program administrator makes visual observations of changes in the employee's physical condition that could affect respirator fit. Such conditions include, but are not limited to, facial scarring, dental changes, cosmetic surgery, or an obvious change in body weight.

(g) All completed fit test records will be provided to HR for recordkeeping purposes.

10.2 Fit test protocols.

(a) Fit testing follows the qualitative fit test protocols in Appendix A of the OSHA Respiratory Protection Standard 29 CFR 1910.134[9].

(b) The fit testing protocols (Bitrex for FFPs; Isoamyl Acetate or Bitrex for tight-fitting elastomeric respirators) are administered by the Chemical Hygiene Officer.
(c) The qualitative fit testing record sheet is found in Appendix D.

11 Employee Training and Information

11.1 Respirator training and information will be provided prior to the initial time when the employee uses the respirator in the workplace, and in a manner that is understandable to the employee.

11.2 Training and information will ensure that the employee can demonstrate the knowledge of the following:
(a) Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator.
(b) The limitations and capabilities of the respirator.
(c) How to inspect, don and doff, use, and perform a user seal check of the respirator.
(d) The procedures for maintenance, cleaning, and storage of the respirator.
(e) How to recognize medical signs and symptoms that may inhibit respirator effectiveness or require a medical evaluation prior to the next required one.
(f) How to use the respirator effectively in emergency situations (if such a situation is a possibility), including situations in which respirators malfunction.
(g) General requirements of the RPP.

11.3 Refresher training will occur annually, and when the following situations occur:
(a) Changes in the workplace or type of respirator used.
(b) Inadequacies in the employee's knowledge or use of the respirator.
(c) Any situation in which retraining seems necessary to ensure safe respirator use.

11.4 For voluntary users the basic advisory information on respirators that is found in Appendix D of the OSHA Respiratory Protection Standard 29 CFR 1910.134[10] will be provided to the user in written form. This information can be found in Appendix A of this RPP.

12 Respirator Use and Maintenance

12.1 No individual is to knowingly work in an area that is, or is suspected of being, Immediately Dangerous to Life and Health (IDLH).

12.2 Facial Hair, Glasses, and Head-Worn PPE. Respirators that are required to fit tight to the face may not be worn by employees who have:
(a) Facial hair that comes between the sealing surface of the facepiece and the face, or that interferes with valve function.
(b) Any other condition that interferes with the face-to-facepiece seal or valve function.

(1) If an employee wears corrective glasses or goggles or other personal protective equipment, the item(s) must be worn so that they do not interfere with the seal of the respirator facepiece to the face of the user.

(2) This means that glasses cannot be worn with full-face respirators, as the temple bars cross through the respirator seal. If needed, corrective lenses or a PAPR may be supplied to employees, if a full-face respirator is required.

12.3 User Seal Check.

(a) For all tight-fitting respirators, employees must perform either the negative or positive pressure seal check as per Appendix B-1 of the OSHA Respiratory Protection Standard 29 CFR 1910.134 (reproduced below), or the manufacturer's recommended seal check method, each time they put on the respirator.

(b) Negative pressure check:

(1) Close off the inlet opening of the canister or cartridge(s), if present, by covering with the palm of the hand(s) or by replacing the filter seal(s).

(2) Inhale gently so that the facepiece collapses slightly, and hold the breath for ten seconds.

(3) If the facepiece remains in its slightly collapsed condition and no inward leakage of air is detected, the tightness of the respirator is considered satisfactory.

(4) Note: the design of the inlet opening of some cartridges cannot be effectively covered with the palm of the hand. The test can be performed by covering the inlet opening of the cartridge with a thin latex or nitrile glove.

(c) Positive pressure check:

(1) Close off the exhalation valve, and exhale gently into the facepiece.

(2) The face fit is considered satisfactory if a slight positive pressure can be built-up inside the facepiece without any evidence of outward leakage of air at the seal.

(3) Note: for most respirators, this method of leak testing requires the wearer to first remove the exhalation valve cover before closing off the exhalation valve and then carefully replacing it after the test.

12.4 Inspection and Repairs.

(a) All respirators used in routine situations shall be inspected before each use and during cleaning.

(b) **Respirator inspections** will include a check of:

(1) Respirator function (i.e., are all the parts and attachments working).

(2) Tightness of connections.

(3) The condition of the various parts including, but not limited to, the:

(a) Facepiece: cracks, tears, or holes; facemask distortion; and cracked or loose lenses/face shield.

(b) Head straps: breaks, tears, loss of elasticity, and broken buckles.

(c) Valves: residue, dirt, and cracks or tears in valve material.

(d) Air supply systems: breathing air quality/grade, condition of supply hoses, hose connection, motors, fans, and settings on regulators and valves.

(e) Cartridges, canisters, or filters: proper cartridge for hazard, expiration, gaskets, and cracks or dents in the housing.

(f) Elastomeric parts: pliability and signs of deterioration.

(c) Respirators that fail inspection or are otherwise defective must be taken out of service immediately and either repaired or disposed. Respirators that are taken out of service are to be tagged out of service, and the employee will be given a replacement respirator of the same make/model/size.

(d) Replacement of simple worn parts (such as a head strap) can be made by following the manufacturer's recommendations and specifications, and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator.

(e) Repairs or adjustments that are more extensive are to be made only by the manufacturer or a technician trained by the manufacturer, and shall use only the respirator manufacturer's NIOSH-approved parts designed for the respirator.

12.5 Cleaning and Storage.

(a) Frequency of Cleaning.

(1) Respirators issued for the exclusive use of an employee must be cleaned and disinfected as often as necessary to maintain it in a sanitary and usable condition.

(2) Respirators used in fit testing and training will be cleaned and disinfected after each use.

(b) Cleaning Procedures. Respirators will be cleaned and disinfected using the procedures in Appendix B-2 of the OSHA Respiratory Protection Standard 29 CFR 1910.134 (reproduced below):

(1) Remove filters, cartridges, or canisters. Disassemble facepieces by removing speaking diaphragms, demand and pressure-demand valve assemblies, hoses, or any components recommended by the manufacturer. Discard or repair any defective parts.

(2) Wash components in warm (43°C [110°F] maximum) water with a mild detergent or with a cleaner recommended by the manufacturer. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt.

(3) Rinse components thoroughly in clean, warm (43°C [110°F] maximum), preferably running water.

(4) The importance of thorough rinsing cannot be overemphasized. Detergents or disinfectants that dry on facepieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

(5) Components should be air-dried, or hand-dried with a clean lint-free cloth.

(6) Reassemble facepiece, replacing filters, cartridges, and canisters where necessary.

(7) Test the respirator to ensure that all components work properly.

(c) Storage. Respirators will be stored:

(1) In a clean container, such as a plastic bag or bin, to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals.

(2) In such a position to prevent deformation of the facepiece and exhalation valve.

(3) Separately from removable cartridges.

(d) Filtering Facepiece Respirators. In general, FFP respirators (i.e., N95 dust masks) will be disposed after each use.

12.6 Cartridge Selection and Change-Out Schedule.

(a) Cartridge Selection. The correct cartridge must be used for each task (see Appendix B, Table 2 for a cartridge selection guide). All filters, cartridges, and canisters will be labeled and color-coded with the NIOSH approval label; the label shall not be removed and must remain legible.

(b) Change-Out Schedule. Cartridges will be changed out per the following schedule:

(1) If chemical warning properties (i.e., smell or taste) are detected, the cartridge must be replaced immediately.

(2) When an end-of-service life indicator (if present) is activated.

(3) At the frequency established during a hazard assessment according to the respirator cartridge change-out schedule, which is based on OSHA's standards and manufacturers' recommendations. Examples of some change-out schedules are provided below:

Contaminant	Change-Out Schedule
Filtering facepiece/dust mask	Visibly dirty or contaminated
HEPA filters	Restricted breathing or visibly dirty, wet, or compromised
Organic vapors	Max 8 hours of total use

13 Record Keeping

13.1 Medical evaluations, training records, and fit testing records are all maintained by HR.

13.2 Medical Evaluations.

(a) Medical evaluation records are maintained for each employee with occupational exposure in accordance with 29 CFR 1910.1020[11], "Access to Employee Exposure and Medical Records." This generally translates to the length of employment, plus 30 years.

13.3 Training Records must be maintained until retraining is completed**.**

13.4 Fit Testing Records must be maintained until the next fit test is administered. The fit testing records will include:

(a) The name or identification of the employee tested.

(b) Type of fit test performed.

(c) Specific make, model, style, and size of respirator tested.

(d) Date of test.

(e) The pass/fail results.

(f) The names and qualifications of person(s) conducting the fit testing.

14 Program Evaluation

14.1 EHS and the employee's supervisor will conduct periodic evaluations of the workplace to ensure that the RPP is being properly implemented; to visit with employees to ensure that they are using the respirators properly; and to consult employees to assess the employees' views on program effectiveness and to identify any problems.

14.2 Any problems that are identified during this evaluation shall be corrected. Factors to be assessed include, but are not limited to:

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

15 Revision Record

DATE	TYPE	PAGE NUMBERS
03/29/2023	Document Creation (replaces previous RPP)	All

16 References

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Appendix A: Voluntary Use of Respirator

ST. OLAF COLLEGE

Some St. Olaf College personnel may choose to wear NIOSH-approved particulate respirators/filtering facepieces (e.g., N-95 disposable dust masks) on a voluntary basis during activities that involve exposures to low-level, non-hazardous nuisance dust or other similar particulates.

According to OSHA and the St. Olaf College Respiratory Protection Program, anyone wearing a filtering facepiece voluntarily must be provided with the following information:

29 CFR 1910.134 Appendix D:
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 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, of 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 respirator's 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 filtering facepiece respirator you have elected to use is approved, when fitted properly, for use against nuisance, non-hazardous particulate (e.g., fiberglass, drywall dust, sawdust, dirt, pollen, animal dander). It will not provide protection from any chemical vapors (i.e., those associated with spray paints or solvents). It is not intended for use during work that may involve exposure to airborne asbestos fibers, silica dust, or heavy metal particles; work that may involve these substances should be reviewed by EHS before the project proceeds.

For questions contact Patrick Ceas, Chemical Hygiene Officer, at ceas@stolaf.edu or (507) 786-3560.

Employee:		**Job Title:**			
Department:		**Supervisor:**			
Respirator Make:		**Respirator Model:**		**Respirator Size:**	
Location of Use:					
Reason for use (describe nature of work and type of dust):					

I have read and understood the information provided above:

Employee Signature Date

Appendix B: Respirator & Cartridge Selection Guides

ST. OLAF COLLEGE

Respiratory protection must be worn whenever you are working in a hazardous atmosphere. The appropriate respirator will depend on the contaminant(s) to which you are exposed and the assigned protection factor (APF) required. Required respirators must be NIOSH-approved, and medical evaluation and training must be provided before use. These general guidelines are to be used by EHS and user in selecting an appropriate respirator for the hazard. Types of respirators include:

- **Air-purifying respirators**, which remove contaminants (particulate or gas/vapor) from an otherwise-breathable atmosphere.
- **Supplied-atmosphere systems**, which supply breathable air.

Assigned Protection Factors (APFs) are the level of protection a properly functioning respirator is expected to provide to a population of properly fitted and trained users (e.g., an APF of 10 means a user could expect to inhale no more than one tenth of the airborne contaminant present). EHS personnel use the APFs listed in Table 1 to select a respirator that meets or exceeds the required level of employee protection. When using a combination respirator (e.g., airline respirators with an air-purifying filter), EHS personnel must ensure the APF is appropriate to the mode of operation in which the respirator is being used. Tables 1 and 2 modified from Appendix 1 of the Northwestern University Respiratory Protection Program[7].

Table 1. Respirator Selection Guide.

Respirator Type	Example	Description	APF
Dust mask (non-NIOSH approved)		• Loose-fitting mask for single-use only. • Flexible pad held over the nose and mouth by an elastic or rubber strap to protect against dusts encountered during construction or cleaning activities (i.e., dusts from drywall, brick, wood, or sweeping). • Cannot protect against hazardous atmospheres. • *Non-NIOSH-approved, disposable dust masks are not approved for use at St. Olaf College.*	N/A
Particulate respirator/ filtering facepiece (NIOSH-approved)	 (e.g., N-95, N-99, P-100)	• Negative-pressure particulate respirator (i.e., respirator that needs a tight seal between the respirator and face and/or neck of the user to work properly that has negative air pressure with respect to the ambient air pressure outside the respirator during inhalation) with a filter as an integral part of the facepiece or with the entire facepiece composed of the filtering medium. • Captures particles in the air (i.e., dusts, mists, fumes), but does not protect against gases or vapors. • Should be disposed of and replaced with a new one each time they are removed. • Medical clearance is not required for voluntary use.	5

ST. OLAF COLLEGE

Table 1. Continued.

Respirator Type	Example	Description	APF

Half-face mask (elastomeric)		• Tight fitting, air-purifying elastomeric respirator that does not provide eye or face protection.
		• Can be used with particulate filters.
		• Can be used with gas/vapor canisters.
		  ○ Are normally used when there are only hazardous gases and vapors in the air.
		  ○ Use chemical filters (i.e., cartridges or canisters) to remove dangerous gases or vapors; cartridges must be matched to the hazard.
		  ○ Do not protect against airborne particles.
		  ○ Only protect against specific gases or vapors.
		  ○ Provide protection only as long as the filter's absorbing capacity is not depleted.
		  ○ Service life of the filter depends upon many factors and can be estimated in various ways.
		• Can be used with combination particulate filter/gas canisters.
			10

Full-facepiece (elastomeric)		• Tight fitting, air-purifying elastomeric respirator that provides eye and face protection from irritants and contaminants when properly fitted and sealed.
		• Can be used with particulate filters.
		• Can be used with gas/vapor canisters.
		  ○ Are normally used when there are only hazardous gases and vapors in the air.
		  ○ Use chemical filters (i.e., cartridges or canisters) to remove dangerous gases or vapors; cartridges must be matched to the hazard.
		  ○ Do not protect against airborne particles.
		  ○ Only protect against specific gases or vapors.
		  ○ Provide protection only as long as the filter's absorbing capacity is not depleted.
		  ○ Service life of the filter depends upon many factors and can be estimated in various ways.
		• Can be used with combination particulate filter/gas canisters.
			50

ST. OLAF COLLEGE

Table 1. Concluded.

Respirator Type	Example	Description	APF
Powered air purifying respirator (PAPR)		• Air-purifying respirator that uses a battery-powered blower to force ambient air through the air-purifying elements to the inlet covering and then pushes the filtered air into the facepiece, which covers all of the user's face. • Since it is loose-fitting, it does not need to be fit tested and can be used by most workers with facial hair. • Another type is the tight-fitting full-facepiece PAPR, which has an elastomeric facepiece made of rubber or silicone, filters, and a blower that operate as they do on a loose-fitting facepiece PAPR; because this PAPR has a tight-fitting facepiece, it must be fit tested. • There are also half-mask PAPRs and PAPRs that have a helmet or hood. • PAPR is a common substitute for users deemed medically unable to wear other types of respirators.	**Half-face mask:** 50 **Full-facepiece:** 1,000 **Helmet/hood:** 425/1,000 **Loose-fitting facepiece:** 25

Appendix B: Respirator & Cartridge Selection Guides

ST. OLAF COLLEGE

Table 2. Cartridge Selection Guide. Air-purifying cartridges must be matched to the containment of concern. Cartridges are color-coded to indicate their intended function.

Color	Type of Protection
Black	Organic vapor
White	Acid gas
Yellow	Organic vapor/acid gas
Green	Ammonia/methyl amine
Olive Green	Organic vapor/formaldehyde
Orange	Mercury vapor/chlorine gas
Purple (Magenta)	Dust, fumes, mists, asbestos, radionucleotides, and highly-toxic particulates (P100)
Black/Purple	Organic vapor and P100 combination
White/Purple	Acid gas and P100 combination
Yellow/Purple	Organic vapor/acid gas and P100 combination
Green/Purple	Ammonia/methyl amine and P100 combination
Olive Green/Purple	Organic vapor/formaldehyde and P100 combination
Pre-filters	Use with dusts, fumes, mists, pesticides, and plants

Appendix C1: Medical Questionnaire

ST. OLAF COLLEGE

To the employee: You are being provided time to answer this questionnaire during normal working hours, or at a time and place that is convenient to you. To maintain your confidentiality, your supervisor must not look at or review your answers, and your supervisor or HR must tell you how to deliver or send this questionnaire to the health care professional who will review it. **Please fill out this questionnaire as accurately as possible.**

Part A, Section 1 (Mandatory):

Employee:		**Job Title:**			
Supervisor:		**Date:**			
Age:		**Sex (M/F):**		**Height (_ft _in):**	**Weight (lbs):**
Phone # where Health Care Professional can reach you:		**Best time to phone you at this number:**			
Has your employer told you how to contact the health care professional (if not your own HCP) who will review this questionnaire (circle one): Yes / No					
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 (e.g., half- or full-facepiece type; powered air purifying)**					
Respirator Make:		**Respirator Model:**		**Respirator Size:**	
Have you worn a respirator previously (circle one): Yes / No **If yes, what type(s):**					

Type of Exposure(s)

Potentially harmful substance(s):

The duration and frequency of respirator use:

Less than 5 hours *per week*	**Yes / No**
Less than 2 hours *per day*	**Yes / No**
2 to 4 hours *per day*	**Yes / No**
Over 4 hours *per day*	**Yes / No**

The expected physical work effort:

Light (e.g., *sitting* while typing or performing light assembly work; *standing* while operating a drill press or controlling machines)	**Yes / No**
Moderate (e.g., *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)	**Yes / No**
Heavy (e.g., *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.)	**Yes / No**

Additional protective equipment to be worn:

Temperature and humidity extremes that may be encountered:

Appendix C1: Medical Questionnaire

ST. OLAF COLLEGE

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?

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

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

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

4) Have you *ever had* any of the following pulmonary or lung problems?

Shortness of breath	**Yes / No**
Shortness of breath when walking fast on level ground or walking up a slight hill or incline	**Yes / No**
Shortness of breath when walking with other people at an ordinary pace on level ground	**Yes / No**
Have to stop for breath when walking at your own pace on level ground	**Yes / No**
Shortness of breath when washing or dressing yourself	**Yes / No**
Shortness of breath that interferes with your job	**Yes / No**
Coughing that produces phlegm (thick sputum)	**Yes / No**
Coughing that wakes you early in the morning	**Yes / No**
Coughing that occurs mostly when you are lying down	**Yes / No**
Coughing up blood in the last month	**Yes / No**
Wheezing	**Yes / No**
Wheezing that interferes with your job	**Yes / No**
Chest pain when you breathe deeply	**Yes / No**
Any other symptoms that you think may be related to lung problems	**Yes / No**

Appendix C1: Medical Questionnaire

ST. OLAF COLLEGE

Part A, Section 2 (Mandatory).

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

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

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

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

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

Breathing or lung problems	**Yes / No**
Heart trouble	**Yes / No**
Blood pressure	**Yes / No**
Seizures	**Yes / No**

8) If you've used a respirator, have you *ever had* any of the following problems?

If you've never used a respirator, circle "No" and go to question 9	**No**
Eye irritation	**Yes / No**
Skin allergies or rashes	**Yes / No**
Anxiety	**Yes / No**
General weakness or fatigue	**Yes / No**
Any other problem that interferes with your use of a respirator	**Yes / No**

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

Appendix C1: Medical Questionnaire

ST. OLAF COLLEGE

Part A, Section 3 (Mandatory or Voluntary).

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

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

11) Do you *currently* have any of the following vision problems?

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

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

13) Do you *currently* have any of the following hearing problems?

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

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

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

Weakness in any of your arms, hands, legs, or feet	**Yes / No**
Back pain	**Yes / No**
Difficulty fully moving your arms and legs	**Yes / No**
Pain or stiffness when you lean forward or backward at the waist	**Yes / No**
Difficulty fully moving your head up or down	**Yes / No**
Difficulty fully moving your head side to side	**Yes / No**
Difficulty bending at your knees	**Yes / No**
Difficulty squatting to the ground	**Yes / No**
Climbing a flight of stairs or a ladder carrying more than 25 lbs	**Yes / No**
Any other muscle or skeletal problem that interferes with using a respirator	**Yes / No**

Employee Comments:

Employee Signature: _____ Date: _____

ST. OLAF COLLEGE

Part B (Optional 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.

1) **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:

2) **Have you ever worked with any of the materials, or under any of the conditions, listed below:**

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

   If "yes," please describe these exposures:

3) **List any second jobs or side businesses you have:**

4) **List your previous occupations:**

5) **List your current and previous hobbies:**

6) **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

7) **Have you ever worked on a HAZMAT team?** **Yes / No**

8) **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**

Employee Signature: _____ Date: _____

Appendix C2: Physician's Evaluation

PHYSICIAN'S or LICENSED HEALTH CARE PROFESSIONAL'S (PLHCP) EVALUATION

Employee Name: _____

PLHCP: Please answer the following two questions:

Yes	No	
_____	_____	Are there limitations on respirator use related to the medical condition of the employee, or relating to the workplace conditions in which the respirator will be used, including whether or not the employee is medically able to use the respirator?
_____	_____	Is there a need for any follow-up medical tests, consultations, or diagnostic procedures (such as a pulmonary function test) that the PLHCP deems necessary to make a final determination?

If the PLHCP answered yes to either question above, please explain the restrictions on respirator use or the additional medical tests below:

_____

_____

_____

_____

_____

_____

PLHCP Name PLHCP Signature Date

At this time, I find no reason to prohibit the above named individual from participating in programs which may require the use of respirators. I have provided the individual with a copy of my recommendation.

PLHCP Name PLHCP Signature Date

Appendix D: Respirator Qualitative Fit Test Record

ST. OLAF COLLEGE

Employee:		**Job Title:**		**Date:**	
Respirator Make:		**Respirator Model:**		**Respirator Size:**	
Testing Solution (Bitrex/Bitter; Saccharin/Sweet; Isoamyl Acetate/Banana Smell)**:**					
# of Squeezes to Sensitivity (10, 20, 30)**:**					

Exercises (mouth slightly open and tongue extended). In order to pass, the individual must not detect the solution during any of the following one-minute exercises.

Is test solution detected?

1. Normal Breathing:	☐ YES	☐ No
2. Deep Breathing:	☐ YES	☐ No
3. Turning Head Side to Side:	☐ YES	☐ No
4. Moving Head Up and Down:	☐ YES	☐ No
5. Talking:	☐ YES	☐ No
6. Bending Over or Jogging in Place:	☐ YES	☐ No
7. Normal Breathing:	☐ YES	☐ No
PASS/FAIL:	☐ **FAIL**	☐ **PASS**

Comments (if any):

Person Conducting Test:

Name _____ Title _____

Employee Fit-Test Acknowledgment:

I have been instructed in the proper use of the above-listed respirator, including proper seal check before use. I will follow all procedures, instructions, and warnings when wearing this respirator.

Employee's Signature _____ Date _____

Appendix E: Respiratory Protection Training Record

ST. OLAF COLLEGE

Training Date:		**Time:**	
Location:		**Trainer:**	

Training Outline
• Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective effect of the respirator. • The limitations and capabilities of the respirator. • How to inspect, don and doff, use, and perform a user seal check or the respirator. • The procedures for maintenance, cleaning, and storage of the respirator. • How to recognize medical signs and symptoms that may inhibit respirator effectiveness or require a medical evaluation prior to the next required one. • How to use the respirator effectively in emergency situations (if such a situation is a possibility), including situations in which respirators malfunction. • General requirements of the RPP.

Other topics discussed (if any):

	Employee Name	**Employee Signature**	**Employee Job Title**
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