RESPIRATORY PROTECTION PROGRAM

Prepared by Triumvirate Environmental
Reviewed and Updated
October 2022

Table of Contents

1.0 Purpose

The Rhode Island College (RIC) Respiratory Protection Program (RPP) establishes procedures for employee respirator use, training, selection, storage, and maintenance. The use of respirators should only be necessary as a means of personal protective equipment (PPE) when all other administrative or engineering controls are not possible or effective in eliminating the hazard(s). This program is in accordance with the Occupational Safety and Health Administration (OSHA) respiratory protection standard (29 CFR 1910.134). For more information on PPE, please review **Rhode Island College's Personal Protective Equipment Program**.

2.0 Scope

RIC is responsible for providing respirators to employees when they are deemed necessary PPE for assigned work duties. Respirators are a form of PPE that either remove contaminants in the air by a filter or air-purification, or supply clean, respirable air. Only respirators certified by the National Institute for Occupational Safety and Health (NIOSH) fit these standards (see **Section 6.0** for more information in respirator selection). Respirators employees at RIC may use include, but are not limited to, N95 masks, half-face respirators with filtering cartridges, and powered air-purifying respirators (PAPR).

RIC will provide respirators that are suitable for the intended use and applicable hazards. Any expense associated with training, medical evaluations, and respiratory protection equipment will be covered by the College. The OSHA respiratory protection standard is only applicable to employees of RIC and does not cover students unless they are employed by the College. Please reach out to the Program Administrator if you have any questions.

This program is applicable to:

- All employees who are required to wear respirators during work operations; and
- Any employee who voluntarily wears a respirator when it is not required.
    - Voluntary respirator users will be subject to the medical evaluation, cleaning, maintenance, and storage elements of this program, and will be provided with necessary training.

A list of Emergency Contacts can be found in **Appendix A**.

3.0 Roles and Responsibilities

3.1 Program Administrator

The duties of the Respiratory Protection Program Administrator include:

- Identifying work areas, process or tasks that require respirators;
- Assisting or coordinating hazard assessments, air monitoring, etc;
- Selecting respiratory protection options for employees;
- Monitoring respirator use to ensure that respirators are used in accordance with their specifications;
- Arranging for and/or conducting training for employees;
- Coordinating fit testing for employees;
- Assisting in coordinating the medical surveillance program with Human Resources;
- Maintaining records required by the program;
- Evaluating the program; and

- Updating written program, as needed.

3.2 Supervisors
Supervisors have the responsibility of ensuring the Respiratory Protection Program (RPP) is administered and implemented in their work area or department. Duties include:

- Determining employees or tasks that require respiratory protection and communicating this with the Program Administrator;
- Monitor work areas and operations to identify respiratory hazards;
- Ensure these employees receive trainings, medical evaluations, fit testing, and appropriate respiratory protection options;
- Ensure the availability of respiratory protection, cartridges, and other accessories in their department or work area;
- Monitor respirator use in their work areas to ensure proper use;
- Ensure respirators are properly maintained, including cleaning and storage; and
- Work with Program Administrator to ensure all parts of this RPP are followed in your department or work area.

3.3 Employees
Each employee is responsible for wearing their respirator when and where required and in the manner in which they are trained. Additionally, employees must:

- Care for and maintain their respirators and store them in a clean, sanitary location;
- Only use respirators and accessories that have been authorized by RIC;
- Inform their Supervisor or the Program Administrator if their respirator no longer fits well or is damaged;
- Inform their Supervisor or the Program Administrator of any respiratory hazards that they feel are not adequately addressed in the workplace and of any other concerns that they have regarding this program;
- Use the respirator in accordance with the manufacturer's instructions and the training received; and
- Adhere to all parts of this Respiratory Protection Program.

4.0 Definitions

Air-purifying respirator means a 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) means 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.

Atmosphere-supplying respirator means a respirator that supplies the respirator user with breathing air from a source independent of the ambient atmosphere and includes supplied-air respirators (SARs) and self-contained breathing apparatus (SCBA) units.

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

Demand respirator means an atmosphere-supplying respirator that admits breathing air to the facepiece only when a negative pressure is created inside the facepiece by inhalation.

Emergency situation means 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 means 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) means 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.

Escape-only respirator means a respirator intended to be used only for emergency exit.

Filter or air purifying element means a component used in respirators to remove solid or liquid aerosols from the inspired air.

Filtering facepiece (dust mask) means 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 factor means a quantitative estimate of the fit of a particular respirator to a specific individual, and typically estimates the ratio of the concentration of a substance in ambient air to its concentration inside the respirator when worn.

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

Helmet means a rigid respiratory inlet covering that also provides head protection against impact and penetration.

High efficiency particulate air (HEPA) filter means 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.

Hood means a respiratory inlet covering that completely covers the head and neck and may also cover portions of the shoulders and torso.

Immediately dangerous to life or health (IDLH) means 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.

Interior structural firefighting means the physical activity of fire suppression, rescue or both, inside of buildings or enclosed structures which are involved in a fire situation beyond the incipient stage. (See 29 CFR 1910.155)

Loose-fitting facepiece means a respiratory inlet covering that is designed to form a partial seal with the face.

Maximum use concentration (MUC) means the maximum atmospheric concentration of a hazardous substance from which an employee can be expected to be protected when wearing a respirator, and is determined by the assigned protection factor of the respirator or class of respirators and the exposure limit of the hazardous substance. The MUC can be determined mathematically by multiplying the assigned protection factor specified for a respirator by the required OSHA permissible exposure limit, short-term exposure limit, or ceiling limit. When no OSHA exposure limit is available for a hazardous substance, an employer must determine an MUC on the basis of relevant available information and informed professional judgment.

Negative pressure respirator (tight fitting) means a respirator in which the air pressure inside the facepiece is negative during inhalation with respect to the ambient air pressure outside the respirator.

Oxygen deficient atmosphere means an atmosphere with an oxygen content below 19.5% by volume.

Physician or other licensed health care professional (PLHCP) means 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 means a respirator in which the pressure inside the respiratory inlet covering exceeds the ambient air pressure outside the respirator.

Powered air-purifying respirator (PAPR) means an air-purifying respirator that uses a blower to force the ambient air through air-purifying elements to the inlet covering.

Pressure demand respirator means a positive pressure atmosphere-supplying respirator that admits breathing air to the facepiece when the positive pressure is reduced inside the facepiece by inhalation.

Qualitative fit test (QLFT) means 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) means an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Respiratory inlet covering means that portion of a respirator that forms the protective barrier between the user's respiratory tract and an air-purifying device or breathing air source, or both. It may be a facepiece, helmet, hood, suit, or a mouthpiece respirator with nose clamp.

Self-contained breathing apparatus (SCBA) means an atmosphere-supplying respirator for which the breathing air source is designed to be carried by the user.

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

Supplied-air respirator (SAR) or airline respirator means an atmosphere-supplying respirator for which the source of breathing air is not designed to be carried by the user.

Tight-fitting facepiece means a respiratory inlet covering that forms a complete seal with the face.

User seal check means an action conducted by the respirator user to determine if the respirator is properly seated to the face.

5.0 Hazard Assessment

5.1 Hazard Assessment

The Program Administrator will select respirators, based on the hazards to which workers are exposed and in accordance with the OSHA Respiratory Protection Standard. The Program Administrator will conduct a hazard assessment for each operation, process, or work area where airborne contaminants may be present in routine operations or during an emergency. See completed hazard assessments in **Appendix E**.

The hazard evaluations shall include:

- List of hazardous substances used in the workplace by department or work process.
- Review of work processes to determine where potential exposures to hazardous substances may occur.
- Exposure monitoring to quantify potential hazardous exposures or a qualitative assessment for new products purchased for use in production.
- The type of respirator for the specific hazard involved will be selected in accordance with the manufacturer's instructions.

5.1.1 Occupational Airborne Exposure Limits

Hazard evaluations compare the actual or reasonably estimated air contaminant levels with airborne exposure limits established by governmental and non-governmental organizations. RIC will reduce exposures so that employees are not exposed to airborne exposure levels above limits established by OSHA, and unless infeasible, also below those limits established by ACGIH and NIOSH.

Definitions for these limits are as follows:

OSHA PEL

This refers to the permissible exposure level set by OSHA. Commonly expressed in parts per million, this represents the maximum time-weighted average concentration of an air contaminant to which an employee can be exposed for 8 hours per day based on a 40-hour work week without adverse effect. If an atmosphere exceeds the PEL, respiratory protection is mandatory. OSHA PELs are published in 29 CFR 1910.1000.

NIOSH REL

The National Institute for Occupational Safety and Health (NIOSH) is a governmental research institute responsible for recommending health and safety standards. NIOSH has developed recommended 10-hour maximum time-weighted average concentration limits known as RELs. RELs are based on more current scientific research than are the OSHA PELs, which were promulgated in 1971. RELs are listed in the NIOSH Pocket Guide to Chemical Hazards, which presents key information and hazard data for 677 chemicals or substance groupings found in the work environment. It includes all the chemicals for which NIOSH has recommended exposure

limits and also lists the OSHA PELs. The Pocket Guide is accessible online at the Centers for Disease Control (CDC) website.

TLV-TWA
This refers to the current threshold limit values established by the American Conference of Governmental Industrial Hygienists (ACGIH). It is similar to the OSHA PEL and NIOSH REL in that it is an 8-hour time-weighted average exposure limit. TLVs are similar to RELs in that they are recommended exposure limits based on recent scientific research.

TLV-STEL
From the ACGIH, refers to the short-term exposure limit (TLV-STEL), which is the maximum time-weighted average concentration of an air contaminant to which an employee can be exposed for a 15-minute period without adverse effect. NIOSH also lists STELs in their Pocket Guide and are indicated by a "ST" designation.

TLV-C
Known as the ACGIH ceiling limit, this is the concentration of an air contaminant that should not be exceeded at any time during the workday. NIOSH also lists ceiling limits in their Pocket Guide and are indicated by a "C" designation.

IDLH
This concentration is considered immediately dangerous to life and health. It is the maximum concentration of an air contaminant from which one could escape within 30 minutes without a respirator and not suffer any irreversible health effects. If an atmosphere exceeds IDLH, a supplied air respirator (SAR) with escape air supply or a self-contained breathing apparatus (SCBA) is mandatory.

Action Level
The airborne exposure level at which certain chemical-specific OSHA standards take effect. Such chemicals for which OSHA has developed individual standards include asbestos, lead, ethylene oxide, and formaldehyde. Employee exposure above the action level is considered "occupational exposure".

5.2 Updating the Hazard Assessment
The Program Administrator will revise or update the hazard assessment when any work processes change that may potentially affect employee exposure. Future reevaluations shall assess previously identified airborne respiratory hazards for changes in potential exposure level, and newly introduced substances that have the potential to create airborne contaminants. Employees should contact their Supervisor or the Program Administrator with any concerns or questions about respiratory hazards.

5.3 Documentation & Communication
5.3.1 Documentation
The Program Administrator will include all hazard assessment results, which may also direct employees to monitoring results, if applicable.

5.3.2 Communication to Employees
Any new exposure monitoring results will be provided by the Program Administrator to affected staff within 15 working days after receipt of the results, per 29 CFR 1910.1450(d)(4). The Program Administrator will file the results and notify all affected employees of its location.

Historical results will be located in the same folder and their location and availability will be relayed during training as outlined in this Program.

6.0 Respirator Selection

Respirators and filtering face-pieces will be provided by Rhode Island College when such equipment is necessary to protect the health of the employee. RIC will provide the respirators which are applicable and suitable for the purpose intended.

6.1 Methods & Resources

6.1.1 Methods

The Program Administrator will select and provide an appropriate respirator based on the respiratory hazard(s) found during the hazard assessment to which the worker is exposed and workplace and user factors that affect respirator performance and reliability. Only NIOSH-certified respirators will be selected for use by employees and the respirator will be used in compliance with the conditions of its certification. Once the hazard assessments have been completed, the Program Administrator may designate subject matter experts (i.e. consultants) in conjunction with the resources detailed in Section 6.1.2 to select respiratory protection which affords suitable and effective employee protection.

6.1.2 Resources

Safety Data Sheets

Manufacturers provide routine respiratory protection recommendations in "*Section 8: Exposure Controls/Personal Protection"* of each SDS. Recommendations will typically include a respirator type, such as air-purifying, atmosphere-supplying or supplied-air, and filtering facepieces (dust masks).

NIOSH Pocket Guide to Chemical Hazards (NPG)

The National Institute for Occupational Safety and Health (NIOSH) publishes a "*Pocket Guide to Chemical Hazards"* intended to inform workers, employers, and occupational health professionals about workplace chemicals and their hazards. The NPG gives general industrial hygiene information for hundreds of chemicals and chemical classes. The NPG clearly presents data for chemicals or substance groupings (i.e. cyanides, fluorides, manganese compounds, etc.) that are found in workplaces. The guide offers key facts but does not give all relevant data. It can help users, including the Program Administrator, recognize and select the proper respirator for airborne hazards.

NIOSH Issued Publications

Some chemicals have been reviewed, in detail, by NIOSH and other organizations. Publications include respirator recommendations for different levels of airborne contamination.

6.1.3 Exposure Limits

Information gathered above should be used in conjunction with substance exposure limits (if any) to aid selection. Permissible Exposure Limits (PELs) published by OSHA, Recommended Exposure Limits (RELs) published by NIOSH, and Threshold Limit Values (TLVs) published by the ACGIH are all valuable resources to help determine when and what type of respiratory protection is recommended at certain thresholds.

6.2 Selection

Following a hazard assessment, respirator and equipment types (i.e. air-purifying respirators, half-mask respirators, combination cartridges, etc.) will be identified by the Program Administrator. All respirators must be certified by the National Institute for Occupational Safety

and Health (NIOSH) and shall be used in accordance with the terms of that certification. After proper respirator and cartridge types have been identified, the Program Administrator will select and purchase exact product/manufacturer information and add them to **Appendix B**, the Approved PPE List. The Program Administrator will select respirators from a sufficient number of respirator models and sizes so that the respirator is acceptable to, and correctly fits, the user. All filters, cartridges, and canisters must be labeled with the appropriate NIOSH approval label. The label must not be removed or defaced while the respirator is in use.

7.0 Medical Evaluation

7.1 Medical Evaluation

Rhode Island College will identify a physician or other licensed health care professional (PLHCP) to perform medical evaluations using a medical questionnaire or an initial medical examination that obtains the same information as the medical questionnaire. The medical questionnaire will be administered confidentially during the employee's normal working hours or at a time and place convenient to the employee. The medical questionnaire will be administered at no cost to the employee and in a manner that ensures that the employee understands its content.

A copy of the OSHA Medical Evaluation Questionnaire can be found at the following link: https://www.osha.gov/sites/default/files/publications/OSHA3789info.pdf

7.2 Information Provided to the PLHCP

The following information will be provided to the PLHCP before the PLHCP makes a recommendation concerning an employee's ability to use a respirator:

- The type and weight of the respirator to be used by the employee;
- The duration and frequency of respirator use (including use for rescue and escape);
- The expected physical work effort;
- Additional protective clothing and equipment to be worn; and
- Temperature and humidity extremes that may be encountered.

Rhode Island College will also provide the PLHCP with a copy of this written respiratory protection program and a copy of OSHA's Respiratory Protection Standard upon request.

7.3 Additional Evaluations

After an employee has received clearance to wear a respirator, additional medical evaluations will be provided if any of the following circumstances are met:

- If the employee reports signs and/or symptoms related to their ability to use the respirator, such as shortness of breath, dizziness, chest pains or wheezing;
- If the evaluating physician or supervisor informs the Program Administrator that the employee needs to be reevaluated; or
- When information found during the implementation of this Program, including observations made during the fit testing and Program evaluation, indicates a need for reevaluation, or If a change occurs in workplace conditions that may result in an increased physiological burden on the employee.

7.4 Medical Clearance

The PLHCP will provide a written notification or recommendation to RIC and the Program Administrator of an employee's clearance status or ability to use a respirator based on the

medical evaluation. The Program Administrator will not allow respirator use until the employee is medically cleared.

The recommendation will provide the following information:

- 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 respirator(s);
- The need for follow-up medical evaluations if applicable; and
- A statement that the PLHCP has provided the employee with a copy of the PLHCP's written recommendation.

If the respirator is a negative pressure respirator and the PLHCP finds a medical condition that may place the employee's health at increased risk if the respirator is used, this identified employee will be deemed unfit to wear a respirator.

7.5 Confidentiality

All examinations and questionnaires are to remain confidential between the employee and the physician. The Program Administrator will only retain the physician's written recommendations regarding each employee's ability to wear a respirator.

8.0 Fit Testing

The Program Administrator, or their designee, will conduct or coordinate fit tests in accordance with the OSHA Respiratory Protection Standard, where required for certain types of respirators.

Employees who wear respirators that require fit testing are required to undergo the procedure:

- Prior to being allowed to wear any respirator with a tight-fitting facepiece;
- Whenever, there are changes in the employee's physical condition that could affect respiratory fit (e.g. obvious change in body weight, facial scarring, etc.); and
- At least annually thereafter.

Employees will be fit tested with the make, model, and size of respirator that they will wear. Employees will be provided with several sizes of selected respirators so that they may find a comfortable, well-fitting unit. Alternative makes and models will be selected and made available in situations where pre-selected respirators present fit and/or comfort issues. A fit test form is located in **Appendix C** of this plan and a passage in **Appendix D** will supplement fit testing procedures.

The fit test will be administered using an OSHA-accepted QLFT or QNFT protocol. The OSHA-accepted QLFT and QNFT protocols and procedures are contained in *Appendix A* of the *OSHA Respiratory Protection Standard.*

9.0 Respirator Use & Maintenance

9.1 Inspections

9.1.1 Visual

All employees shall conduct a visual inspection before and after each use and during cleaning of a respirator by visually inspecting unit tightness of connections, and the condition of the various parts including, but not limited to, the facepiece, head straps, valves, connections, and

cartridges, canisters or filters, and a check of elastomeric parts for pliability and signs of deterioration.

9.1.2 User Seal Checks

All employees shall conduct user seal checks each time they wear their respirators. Employees shall use either the positive or negative pressure check (depending on which test works best for them) as specified in the OSHA Respiratory Protection Standard.

Positive Pressure Test

This test is performed by closing off the exhalation valve with your hand. Breathe air into the mask. The face fit is satisfactory if some pressure can be built up inside the mask without any air leaking out between the mask and the face of the wearer.

Negative Pressure Test

This test is performed by closing of the inlet openings of the cartridge with the palm of your hand. Some masks may require that the filter holder be removed to seal off the intake valve. Inhale gently so that a vacuum occurs within the face piece. Hold your breath for ten (10) seconds. If the vacuum remains, and no inward leakage is detected, the respirator is fit properly.

9.2 Cleaning

9.2.1 General

The Program Administrator shall provide each respirator user with a respirator that is clean, sanitary, and in good working order, and shall ensure that respirators are cleaned and disinfected using the procedures in this section, or procedures recommended by the respirator manufacturer, provided that such procedures are of equivalent effectiveness.

9.2.2 Cleaning Procedures

Employees shall clean respirators using the following steps:

- Remove filters, cartridges, or canisters. Disassemble facepieces by removing canisters, filters, or any components recommended by the manufacturer. Discard or repair any defective parts.
- Wash components in warm 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.
- Rinse components thoroughly in clean, warm, preferably running water. Drain.
- When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in other commercially available cleansers of equivalent disinfectant quality when used as directed, if their use is recommended or approved by the respirator manufacturer.
- Components should be hand-dried with a clean lint-free cloth or air-dried.
- Reassemble facepiece, replacing filters, cartridges, and canisters prior to their end of service life.
- Test the respirator to ensure that all components work properly.

9.2.3 Frequency

The respirators shall be cleaned and disinfected at the following intervals:

- Respirators issued for the exclusive use of a single employee shall be cleaned and disinfected as often as necessary to be maintained in a sanitary condition;
- Respirators issued to more than one employee shall be cleaned and disinfected before being worn by different individuals; and

- Respirators used during fit testing shall be cleaned and disinfected after each use.

9.3 Storage
The Program Administrator shall ensure that all respirators are stored to protect them from damage, contamination, dust, sunlight, extreme temperatures, excessive moisture, and damaging chemicals, and they shall be packed or stored to prevent deformation of the facepiece and exhalation valve.

9.4 Defects & Broken Units
If, during an inspection, an employee discovers a defect in a respirator, they shall bring the defect to the attention of the Program Administrator who will decide whether to:

- Temporarily take the respirator out of service until it can be repaired;
- Perform a simple fix on the spot, such as replacing a head strap; or
- Dispose of /replace the respirator due to an irreparable problem or defect.

9.5 Cartridges / Filters
All cartridges / filters shall be replaced by employees according to manufacturer specifications on their end of service life.

9.6 Employee Restrictions
Employees are not permitted to wear tight-fitting respirators if they have any condition, such as facial scars, facial hair, or missing dentures that would prevent a proper seal. Employees are not permitted to wear that may interfere with the seal between the face and the facepiece. Lastly, employees shall use their respirators under conditions specified in this Program and for the applicable task only, in accordance with the training they receive on the use of each particular model.

10.0 Procedures for Voluntary Use

10.1 Notification of Employer
Employees who seek authorization to wear respirators for personal comfort, on a voluntary basis, shall inform the Program Administrator.

10.2 Authorization
The Program Administrator may permit the voluntary use of respiratory protective equipment on a case-by-case basis depending on:

- The results of a medical evaluation as described in this plan;
- Documentation (**Appendix F**) that states the employee has read and understands the procedures for cleaning, storage, and maintenance outlined in this Program; and
- If a hazard assessment does not identify the need for required respirator use.

If the Program Administrator authorizes an employee, they shall provide them with a copy of this RPP and have them sign a Voluntary Respirator Use Form found in **Appendix F**, and organize a medical evaluation as outlined in this Program. See the **Section 12** of this program for more information.

10.3 Employee Notification & Restrictions
The Program Administrator will directly notify each employee as they are authorized.
The Program Administrator may restrict authorized users to the task(s) for which they originally sought authorization.

11.0 Training

Training will be provided to respirator users on the contents of the RIC Respiratory Protection Program and their responsibilities, and on the OSHA Respiratory Protection Standard. All affected employees will be trained prior to using a respirator in the workplace.

11.1 Content

Training will be provided by the Program Administrator and will include:

- The contents of the Respiratory Protection Program;
- General requirements of the OSHA Respiratory Protection Standard (29 CFR 1910.134);
- Specific respiratory hazards of the facility or job tasks;
- Proper selection and use;
- What the limitations and capabilities of the respirator are;
- Medical evaluation and fit testing;
- Donning and doffing of respirators;
- How to inspect, put on and remove, use, and check the seals of the respirator;
- Procedures for maintenance and storage of the respirator;
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators; Emergency use procedures;
- Medical signs and symptoms limiting the effective use of respirators.
- The general requirements of the OSHA Respiratory Protection Standard (29 CFR 1910.134);
- The Site-specific procedures detailed in this Respiratory Protection Plan; and

11.2 Administration

Training is administered by the Program Administrator (or his/her designee) via PowerPoint slide deck and quiz.

11.3 Frequency

All affected employees and their supervisors are trained:

- Prior to using a respirator in the workplace;
- When changes in the workplace or the type of respirator render previous trainings obsolete;
- When inadequacies in the employee's knowledge or use of the respirator indicate that the employee has not retained the requisite understanding or skill;
- As other situations arise where retraining appears necessary to ensure safe respirator use; and
- At least annually thereafter.

11.4 Documentation

Respirator documentation will include the make, model, and size of respirator for which employees have been trained and fit-tested. This documentation will be kept on file for the duration of employment.

12.0 Program Evaluation

The Program Administrator will regularly consult Supervisors and employees required to use respirators to assess the employees' views on effectiveness or problems with the Program.

The Program Administrator and Supervisors will regularly monitor respirator use to ensure that respirators are used in accordance with their specifications and this Program. The Program Administrator shall execute corrective actions as deficiencies or changes dictate. This written Respiratory Protection Program (RPP) will be reviewed and updated by the Program Administrator at least annually, and as necessary.

13.0 Recordkeeping

13.1 Written Program & Standard

The Program Administrator retains a written copy of this Program and the OSHA Respiratory Protection Standard. The complete OSHA standard can be accessed on www.OSHA.gov (29 CFR 1910.134).

13.2 Training Records

Copies of all training records are retained by the Program Administrator.

13.3 Medical Records

13.3.1 Medical Evaluation

The medical record for each employee shall be preserved and maintained for at least the duration of employment plus 30 years.

13.3.2 Fit Testing

The Program Administrator retains a copy of qualitative fit tests administered to employees and are retained until the next fit test is administered. These records include the name of each employee, the type of fit test performed, the type of respirator and size tested, the date of test, and pass/fail results.

13.3.3 Employee Exposure Records

Each employee exposure record shall be preserved and maintained for at least 30 years.

13.4 Access to Records

13.4.1 Program

Written materials required to be retained under this section shall be made available upon request to affected employees.

13.4.2 Employee Medical Record Access

Whenever an employee or designated representative requests access to a record, the Program Administrator shall assure that access is provided in a reasonable time, place, and manner, and that all requests for copies of records are provided at no cost to the employee.

Appendix A: Emergency Contact List

Title	Name	Contact Info
Interim Director of Facilities and Operations	Greg Gammell	(401) 456-9788 ggammell@ric.edu
Campus Police Director of Security and Safety/Chief of Campus Police	Col. James Mendonca	(401) 456-8888 jmendonca@ric.edu
Health Services Director of Health Services	Dr. Marie Wilks	(401) 456-8055 mwilks@ric.edu
Facilities and Operations Administrative Officer	Julie Teixeira	(401) 456-8262 jteixeira@ric.edu

Appendix B: Approved PPE

Process	Name	Type	Manufacturer	Model/Product #

Appendix C: Respirator Fit Test Record

Date: _____ **Test Conducted by: _____**

Employee Name	Employee #	Job Title	Department

Respirator Selected:	Make	Model	Size
	☐ Other (Describe)		

Factors affecting fit (Check ones that apply)	Clean Shaven	☐	Scarring	☐	Beard Growth/ Moustache	☐
	Dentures/teeth absent	☐	Glasses	☐	Other	☐

Test Method	Sensitivity Test Pass ☐ Fail ☐
Bitrex ☐ Irritant Smoke ☐	Number of Squeezes until taste: ≤ 10☐ ≤ 20☐ ≤ 30☐

Fit Test Procedure	Exercise	Pass	Fail
	1. Positive Pressure	☐	☐
	2. Negative Pressure	☐	☐
	3. Breathe Normally	☐	☐
	4. Breathe Deeply	☐	☐
	5. Turn Head (side to side):	☐	☐
	6. Nod Head:	☐	☐
	7. Recite Rainbow Passage (over)	☐	☐
	8. Bending at waist / run in place	☐	☐

FINAL TEST RESULT	PASS ☐	FAIL ☐

CERTIFICATION

The above respirator fit test was performed on and by the persons listed. The results indicate the performance of the listed respiratory protective device, as fitted on the employee named on this record under controlled conditions. Fit testing, as performed, measures the ability of the respiratory protective device to provide protection to the individual tested. Improper use, maintenance, or application of this or any other respiratory protective device will reduce or eliminate protection.

Employee Signature _____

Appendix D: Completed Hazard Assessments

HAZARD ASSESSMENT LOG

Process Location	Hazards	Exposure Levels	Controls
Spray Booths	Non-toxic Particulates form spray and sand blasting operations	Not expected to exceed OSHA levels	The Booths themselves and the rooms they are contained within have appropriate ventilation and are used seldomly and for short periods of time. Particulate respirators (dust masks) are available and primarily for operator comfort.
Metals Workshop	Non-toxic Particulates from shop operations	Not expected to exceed OSHA levels	The room(s) contain appropriate ventilation and isolating engineering controls. Particulate respirators (dust masks) are available and primarily for operator comfort.
Printmaking Workshop	Acids used for etching	Not expected to exceed OSHA levels	The room contains appropriate ventilation. Mixing the chemicals is controlled by SOP and only 3 people are permitted do the mixing. Particulate respirators (dust masks) are available and primarily for operator comfort.
Ceramics	Non Toxic Particulates from working with clay	Not expected to exceed OSHA levels	The room(s) contain appropriate ventilation. Particulate respirators (dust masks) are available and primarily for operator comfort.
Kiln Sanding	Silica Dust from the kiln	No expected to exceed OSHA level	Performed in High Ventilation area and respirators are worn. Performed by 1 individual only
Machine and Carpentry Shops	**Non-toxic paticulates** from shop operations, cutting, milling, grinding, turning.	Not expected to exceed OSHA, ACGIH levels.	General and spot ventilation, enclosures for equipment. Particulate respirators primarily for operator comfort.

Appendix E: Voluntary Respirator Use Form

Disclaimer: All employees who choose to wear respirators on a voluntary basis (for personal comfort purposes) shall adhere to applicable provisions of this Respiratory Protection Program (RPP), as outlined in the statements below.

Respirators are an effective method of protection against designated hazards when properly selected and worn. 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 follow the below precautions to be sure that the respirator itself does not present a hazard.

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.

By signing below, I certify that I've read, understand, and agree to adhere to the provisions of this Respiratory Protection Program.

Name: _____

Signature: _____

Date: _____