

# Respiratory Protection Program

## Bryant University

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## 1.0 Purpose

The Bryant University (Bryant) 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 **Bryant University's Personal Protective Equipment Program**.

## 2.0 Scope

Bryant 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 Bryant may use include, but are not limited to, N95 masks, half-face respirators with filtering cartridges, and powered air-purifying respirators (PAPR).

Bryant 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 University. The OSHA respiratory protection standard is only applicable to employees of Bryant and does not cover students unless they are employed by the University. 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 Risk Management & Safety (RMS)

The duties of Risk Management & Safety (RMS) include:

- Assist in identifying work areas, processes, or tasks that require respirators;
- Assisting or coordinating hazard assessments, air monitoring, etc;
- Aid in selection respiratory protection options for employees, as necessary;
- Monitoring respirator use to ensure that respirators are used in accordance with their specifications;
- Provide or facilitate training for employees;
- Coordinating fit testing for employees;
- Assisting in coordinating the medical surveillance program with Human Resources;
- Assist in maintenance of records required by the program;
- Consult with affected employees and their supervisors regularly to ensure that the program is effective and identify and correct any deficiencies within the program.
- Evaluation of this program; and
- Update 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 RMS;
- Monitor work areas and operations to identify respiratory hazards;
- Monitoring respirator use to ensure that respirators are used in accordance with their specifications;
- Ensure affected employees receive training, medical evaluations, fit testing, and appropriate respiratory protection options;



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- 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 RMS to ensure all parts of this RPP are followed in their 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 accordance with this program;
- Only use respirators and accessories that have been authorized by Bryant;
- Use and wear the respirator in accordance with the manufacturer's instructions and the training received;
- Ensure any changes that may affect the fit of the respirator is communicated to their Supervisor for evaluations and fit testing;
- 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 and wear 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

RMS or department supervisors will select respirators, based on the hazards to which workers are exposed and in accordance with the OSHA Respiratory Protection Standard. A hazard assessment may



be conducted for operations, processes, or work areas where airborne contaminants may be present in routine operations or during an emergency.

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. Bryant 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



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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

RMS or department supervisors 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 RMS with any concerns or questions about respiratory hazards.

## 5.3 Documentation & Communication

### 5.3.1 Documentation

RMS or department supervisors 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 RMS and the department supervisor to affected staff within 15 working days after receipt of the results, per 29 CFR 1910.1450(d)(4). RMS 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 Bryant University when such equipment is necessary to protect the health of the employee. Bryant will provide the respirators which are applicable and suitable for the purpose intended.

### 6.1 Methods & Resources

#### 6.1.1 Methods

RMS/department supervisors 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, RMS 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 RMS. 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 RMS and department supervisors will select and purchase the respirators. Respirators will be selected from a sufficient number of respirator model and size options 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

Bryant University 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.



Bryant University 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 Bryant and the Program Administrator of an employee's clearance status or ability to use a respirator based on the medical evaluation. Bryant University 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. Bryant University will only retain the physician's written recommendations regarding each employee's ability to wear a respirator.

## 8.0 Fit Testing

RMS and department supervisors 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 B** of this plan and a passage in **Appendix C** of this plan 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

Each respirator provided shall be clean, sanitary, and in good working order, and 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

Department supervisors 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 their supervisor 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 their supervisor and RMS.

### 10.2 Authorization

Bryant University 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 D**) 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 Bryant 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 D**, and organize a medical evaluation as outlined in this Program.



## 10.3 Employee Notification & Restrictions

RMS will directly notify each employee as they are authorized.

RMS 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 Bryant University 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 Bryant University 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 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.

## 11.3 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

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

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

## 13.0 Recordkeeping

### 13.1 Written Program & Standard

Risk Management and Safety retains a written copy of this Program and the OSHA Respiratory Protection Standard. The complete OSHA standard can be accessed on [www.OSHA.gov](http://www.OSHA.gov) (29 CFR 1910.134).

### 13.2 Training Records

Copies of all training records are retained by departments with affected employees as well as RMS.



## **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**

RMS 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 RMS and Human Resources 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

Authority	Notify	Telephone
Bryant Department of Public Safety (DPS)		Emergency (401) 232-6911  Office (401) 232-6001
Risk Management & Safety (RMS)	Bill Thomas Risk Manager	<a href="mailto:RMS@bryant.edu">RMS@bryant.edu</a> <a href="mailto:Bthomas12@bryant.edu">Bthomas12@bryant.edu</a>  (401) 232-6006
Facilities	Andy DeMelia Assistant Vice President of Facilities  Robert Dunning Assistant Director of Facilities	<a href="mailto:ademelia@bryant.edu">ademelia@bryant.edu</a> (401) 232-6082  <a href="mailto:rdunning@bryant.edu">rdunning@bryant.edu</a> (401) 232-6912
Town of Smithfield Fire Department	To Report a Fire, Environmental Emergency	(401) 949-1330  911
Town of Smithfield Police Department		(401) 231-2500  911
Hospital	Rhode Island Hospital	593 Eddy St Providence, RI 02903  (401) 444-4000
	Our Lady of Fatima Hospital	200 High Service Ave North Providence, RI 02904  (401) 456-3000
	Landmark Hospital	115 Cass Ave Woonsocket, RI 02895  (401) 769-4100
Poison Control	Regional Poison Control Center	1-800-222-1222
Rhode Island Department of Environmental Management	Oil Spill or Release	(401) 222-3070 (24 hr) (401) 222-1360 (Business Hours)



# Bryant University

Rhode Island Emergency Management Agency (RIEMA)	24 Hour Response	(401) 946-9996
National Response Center	Notification required when any release to the environment exceeding reportable quantity or a sheen on the water occurs.	800-424-8802
US Environmental Protection Agency Regional Administrator (Region I)	Environmental Emergency	888-372-7341 1-800-424-9346
Local Emergency Planning Committee (LEPC District 1)	John Silva North Providence	(401) 597-6667 <a href="mailto:firechief@northprovidenceri.gov">firechief@northprovidenceri.gov</a>
Rhode Island Department of Labor and Training (RI DLT)	Employee Injuries	(401) 462-8570
Smithfield Sewer Authority	Spill to Sewer/Storm Drain	(401) 233-1041
PAL Environmental Services	Oil Spill Clean-Up	(401) 232-3353
Triumvirate Environmental	Oil Spill Clean-Up	800-966-9282





## Appendix B: Respirator Fit Test Record

Date: \_\_\_\_\_ Test Conducted by: \_\_\_\_\_

Employee Name	Employee #	Job Title	Department

<b>Respirator Selected:</b>	Make	Model	Size
	<input type="checkbox"/> Other (Describe)		

<b>Factors Affecting Fit (Check ones that apply)</b>	Clean Shaven	<input type="checkbox"/>	Scarring	<input type="checkbox"/>	Beard Growth/Moustache	<input type="checkbox"/>
	Dentures/teeth absent	<input type="checkbox"/>	Glasses	<input type="checkbox"/>	Other	<input type="checkbox"/>

<b>Test Method</b>	<b>Sensitivity Test</b>
Bitrex Solution <input type="checkbox"/>	Pass <input type="checkbox"/>
Saccharin Solution <input type="checkbox"/>	Fail <input type="checkbox"/>
Irritant Smoke <input type="checkbox"/>	Number of Squeezes until taste: ≤ 10 <input type="checkbox"/> ≤ 20 <input type="checkbox"/> ≤ 30 <input type="checkbox"/>

Fit Test Procedure	Exercise	Pass	Fail
	1. Demonstrates pre-use inspection	<input type="checkbox"/>	<input type="checkbox"/>
	2. Demonstrates proper donning of respirator	<input type="checkbox"/>	<input type="checkbox"/>
	3. Positive Pressure Fit Check	<input type="checkbox"/>	<input type="checkbox"/>
	4. Negative Pressure Fit Check	<input type="checkbox"/>	<input type="checkbox"/>
	5. Breathe Normally	<input type="checkbox"/>	<input type="checkbox"/>
	6. Breathe Deeply	<input type="checkbox"/>	<input type="checkbox"/>
	7. Turn Head (side to side)	<input type="checkbox"/>	<input type="checkbox"/>
	8. Nod Head	<input type="checkbox"/>	<input type="checkbox"/>
	9. Recite Rainbow Passage (over)	<input type="checkbox"/>	<input type="checkbox"/>
	10. Bending at waist / run in place	<input type="checkbox"/>	<input type="checkbox"/>
	11. Demonstrates proper doffing of respirator	<input type="checkbox"/>	<input type="checkbox"/>
	12. Explains respirator cleaning procedures	<input type="checkbox"/>	<input type="checkbox"/>
	13. Demonstrates proper storage of respirator	<input type="checkbox"/>	<input type="checkbox"/>

<b>FINAL TEST RESULT</b>	PASS <input type="checkbox"/>	FAIL <input type="checkbox"/>
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**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 C: Rainbow Passage

**WHEN THE SUNLIGHT STRIKES RAINDROPS IN THE AIR, THEY ACT LIKE A PRISM AND FORM A RAINBOW.**

**THE RAINBOW IS A DIVISION OF WHITE LIGHT INTO MANY BEAUTIFUL COLORS.**

**THESE TAKE THE SHAPE OF A LONG ROUND ARCH, WITH ITS PATH HIGH ABOVE, AND ITS TWO ENDS APPARENTLY BEYOND THE HORIZON.**

**THERE IS, ACCORDING TO LEGEND, A BOILING POT OF GOLD AT ONE END.**

**PEOPLE LOOK, BUT NO ONE EVER FINDS IT.**

**WHEN A MAN LOOKS FOR SOMETHING BEYOND HIS REACH, HIS FRIENDS SAY HE IS LOOKING FOR THE POT OF GOLD AT THE END OF THE RAINBOW.**



## Appendix D: 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: \_\_\_\_\_