

BOWDOIN COLLEGE

RESPIRATORY PROTECTION PROGRAM

Purpose

This document meets the requirements outlined in OSHA Title 29 CFR 1910.134 (*Respiratory Protection Standard*) for the development, implementation, and maintenance of a written respiratory protection program (RPP). The purpose of the program is to provide information to designated employees of Bowdoin College regarding respiratory hazards in their workplace, and the proper use of respiratory personal protective equipment (PPE).

Scope

The respiratory protection program applies to designated employees who may be occupationally exposed to hazardous atmospheres (current *RPP Designated Employees List* attached), where engineering and work practice controls may not be adequate to prevent exceedence of health standards.

Program Components

1. **Program Administrator.** The Manager of Environmental Health and Safety (EHS) will be the RPP program administrator.
2. **Hazard Determination.** Supervisors are responsible for reviewing their operations and job requirements to determine if employee respirator usage is necessary. Hazards may include airborne concentrations of fumes, dusts, fogs, mists, sprays, smoke, gases, particulates, or vapors that exceed the National Institute of Occupational Safety and Health (NIOSH) air quality standards for the specific materials or chemicals. Information from Material Data Safety Sheets (MSDSs) may be used to make this determination, in coordination with the EHS Manager. Upon determination of a hazard, the Supervisor will provide the employee with written work practices specific to the task and location, and conduct work area surveillance during the performance of the task.
3. **Equipment Selection.** Respiratory PPE must be selected to address the specific hazards identified, and is based on respirator function, materials, and the type of filtration needed.
 - Of the two types of respirators (air-purifying and supplied-air), only air-purifying or “cartridge”-type respirators are to be used by College employees. Cartridge respirators use disposable filters to remove airborne contaminants, and may be either half-mask (HM) or full-face (FF) in design. Cartridge respirators do not supply air, and cannot be used in oxygen-deficient atmospheres.
 - Most respirators are constructed of rubber, silicone, and/or synthetic materials suitable for most atmospheres; check the MSDS and the vendor reference tables to ensure that the materials used are compatible with the hazards being addressed.
 - Filter cartridges are specific to various categories of hazards (i.e., chlorine, ammonia, particulates, etc.) and must be selected on that basis.

All respiratory protective devices must be jointly approved by the Mine Safety and Health Administration (MSHA) and the National Institute for Occupational Safety and Health (NIOSH), and must not impair the employee’s ability to see, hear, communicate, or perform their task safely. The EHS Manager will coordinate the purchase of respirators, cartridges, and associated PPE.

4. **Employee Training.** The EHS Manager will coordinate and/or provide annual training, fit testing, and medical evaluations for employees who use respirators. Records of training will be kept by the EHS Office and Human Resources for 3 years.

Training is mandatory for any employee prior to using any respirator, and shall include (at a minimum) the following components:

- The nature of respiratory hazards, and consequences of improper respirator use.
 - Available engineering and administrative controls and the need for respirators.
 - Reasons for the selection of a particular type of respirator.
 - Capabilities and limitations of various respirators.
 - Methods of donning, inspecting, checking fit, and operation of the respirator.
 - Proper maintenance, cleaning, and storage of the respirator.
 - Proper method for handling emergency situations, including situations in which the respirator malfunctions or the cartridges “break through”.
 - Recognition of medical signs and symptoms that may limit or prevent the effective use of respirators.
 - The general requirements of the OSHA respirator standard (29 CFR 1910.134).
5. **Fit Testing.** Fit testing shall be conducted annually, in conjunction with the medical evaluation. A satisfactory qualitative fit test (QLFT) with their issued equipment will be completed for each employee who is designated to wear a respirator. Any employee who is required to wear a respirator must be clean-shaven at the time of testing and use, to ensure a tight and appropriate seal. Eyeglasses may also present a problem for obtaining a satisfactory fit with a full-face respirator, and will be evaluated during fit testing. No employee shall wear a respirator unless they have been trained and fit tested within the previous 12 months. Records of fit testing will be kept by the EHS Office and Human Resources for 3 years.
6. **Medical Evaluations.** Employees who are designated to use respirators will receive baseline and annual medical evaluations to ensure that they are physically able to perform work with a respirator. The evaluation may consist of a medical questionnaire, physical exam, and/or pulmonary function test. If employees are working in toxic atmospheres, appropriate medical testing may be ordered at any time to determine exposure levels. Occupational Health Associates (OHA) shall conduct the exams, and provide a written recommendation regarding the employee’s ability to use a respirator, including any limitations of respirator use and or work conditions, and whether any follow up medical evaluation is necessary. The employee shall be provided with a copy of any recommendations made by the medical provider. Records of all medical evaluations will be kept by the EHS Office and Human Resources for 30 years.
7. **Inspection, Cleaning, Maintenance, and Storage.** Each employee required to wear a respirator will be issued one of the appropriate size and type for their sole use; employees may only wear their own respirator, and are responsible for its cleaning and maintenance. All respirators must be inspected before and after each use, with special attention to rubber or plastic parts subject to deterioration. Maintenance and repairs must be performed in accordance with the manufacturer’s guidelines. Respirators must be stored to protect them from dust, sunlight, heat, extreme cold, excessive moisture, damaging chemicals or other threats to their condition. If a respirator is reissued to another employee, it must first be cleaned and disinfected.

Program Review

This written program will be audited by the EHS Manager at least annually, by reviewing the status of employee respirator usage, annual training, fit testing, and medical evaluations. Supervisors of employees who wear respirators shall inform the EHS Manager of any changes in respirator usage or needs.

Attachment

RPP Designated Employees List