

Palm Beach State College
Florida's First Public Community College



**RESPIRATORY PROTECTION
PROGRAM**

2012

PALM BEACH STATE COLLEGE RESPIRATORY PROTECTION PROGRAM

1. PURPOSE

It is the policy of Palm Beach State College to provide employees with a safe and healthful work environment. The primary objective of the Respiratory Protection Program is to prevent harmful exposure to occupational air contaminants when engineering and administrative controls are not feasible or effective. The Occupational Safety and Health Standards for General Industry found in Title 29, Code of Federal Regulations, Part 1910, paragraph 134, abbreviated 29 CFR 1910.134, establish permissible practices and requirements for this program. The Safety & Risk Manager will function as the Program administrator. A copy of the current written Respiratory Protection Program will be available in the Safety & Risk Management Department or online at the Safety & Risk Management web site.

2. DEFINITIONS

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

Fit test – The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual. Qualitative fit-testing will be the preferred method of fit-testing.

Qualitative fit test – A pass/fail fit test to assess the adequacy of respirator fit that relies on the individual's response to the test agent.

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

3. RESPONSIBILITIES

- Pursuant to the requirements of 29 CFR 1910.137 (d)(1)(iii), Palm Beach State College is responsible for identifying and evaluating the respiratory hazard(s) in the workplace, including a reasonable estimate of employee exposure to such hazard(s) and an identification the contaminant's chemical state and physical form.
- Palm Beach State College is responsible for mitigating respiratory hazards to its employees by engineering or administrative controls. When those measures are not feasible or effective, the College is responsible for providing its employees with respirators that are appropriate for their intended use when necessary to protect their safety and health. In addition, the College shall provide appropriate training and medical evaluations to employees at no cost to them.
- The Safety & Risk Manager will be responsible for establishing and implementing the Respiratory Protection Program.

- District and campus Facilities Managers and supervisors will be responsible for enforcing the program and ensuring compliance with this procedure in their respective departments.
- Employees required to use respirators are responsible for their use, care and maintenance in accordance with their instructions and training and for reporting any trouble or malfunction of the respirator to their supervisors. Employees whose only use of respirators involves the voluntary use of filtering facepieces (dust masks) are not included in the Respiratory Protection Program, except for the information provided in Appendix D to Section 1910.134 (see Attachment A).

4. HAZARDS REQUIRING A RESPIRATOR

Based on the hazard evaluation that the College has performed, the respiratory hazards to which employees at Palm Beach State College may be exposed include the following:

- Use of products containing chemicals posing a risk of inhalation hazard during performance of cleaning or maintenance activities in areas that are poorly ventilated.
- Use of products or paints requiring the use of a respirator as per the product-specific Material Safety Data Sheet.
- Use of paints having a risk of inhalation hazard, e.g., oil-based paints, in poorly ventilated areas.
- Spraying of paints.
- Spray application of herbicides or pesticides.
- Conduct of maintenance activities generating copious quantities of dust, e.g., drywall sanding.

The frequency of exposure is dependent upon the frequency of operations involving the exposure scenarios noted above. The contaminant's chemical state and physical form may be determined from specific product's Material Safety Data Sheet.

5. PROCEDURES

A. Respirator Selection

Air-purifying respirators with tight-fitting facepieces will be used exclusively by Palm Beach State College. Respirators are selected and approved for use by the Safety & Risk Manager and the District/Facilities Manager at the campus based upon the physical and chemical properties of the air contaminants and the concentration levels likely to be encountered by the employee. Only approved respirators are allowed for use.

The Facilities Manager will provide a NIOSH-certified respirator immediately to each employee who is assigned to a job that requires respiratory protection. The Facilities Manager will provide replacement respirators and filters as required.

B. Fit-Testing

Employees will be properly fitted and tested for a face seal prior to use of the respirator in a contaminated area and must pass a fit test. Qualitative fit-testing will be the preferred method of fit-testing. The fit test will be documented using Attachment B.

Fit-testing will not be done on employees with facial hair or jewelry that passes between the respirator seal and the face or interferes with valve function. Such facial hair includes stubble, beards and long sideburns. Wearing of corrective lenses or goggles or other personal protective equipment shall not interfere with the seal of the facepiece to the face of the user.

Fit-testing will be conducted at least annually, or whenever a different respirator facepiece is used (e.g., in response to a report that the fit of the employee's current respirator is unacceptable), or when changes in the employee's physical condition that could affect respirator fit occur.

Records of fit-testing shall be maintained in the Safety & Risk Management Department and retained there for respirator users until the next fit test is administered.

C. Medical Evaluation

Employees included in the Respiratory Protection Program must participate in a medical evaluation to determine their ability to use a respirator prior to its use or fit-testing. The evaluation is made initially, prior to annual fit-testing and when there is a change in respirator type or physical condition indicating a need for re-evaluation.

The OSHA medical evaluation questionnaire, Appendix C to Section 1910.134 (see Attachment C), will be completed by the employee and reviewed by the College's worker's compensation physician or other licensed health care professional (LHCP) prior to respirator fit-testing. Employees will be issued a respirator upon approval notification from the physician or LHCP.

A follow-up medical examination, including any medical tests, consultations or diagnostic procedures deemed necessary by the physician or LHCP to make a final determination, will be provided to any employee who gives a positive response to any of questions 1 through 8 in section 2, Part A of Appendix C or whose initial medical evaluation demonstrates the need for a follow-up medical examination.

The medical questionnaire and 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. The employee shall be provided with an opportunity to discuss the questionnaire and examination results with the physician or LHCP.

If provided to the College, records of medical evaluations will be maintained in the College's Human Resources Department in the individual employee's personnel file in accordance with 29 CFR 1910.1020.

D. Use of Respirators

Respirators shall be used in routine and reasonably foreseeable emergency situations in accordance with the manufacturer's instructions and the training provided. Respirators shall not be worn in atmospheres containing contaminants they were not designed to protect against, e.g. using an air-purifying respirator designed to filter dust particles to protect against gases, vapors or very small solid particles of fumes or smoke.

Employees shall not anyone else's respirator.

Employees shall perform a seal check as per manufacturer's instruction and their training each time they put on the respirator.

Respirators shall not be used with beards or other facial hair, jewelry, corrective lenses or goggles or any other condition that prevents direct contact between the face and the edge of the respirator or that interferes with valve function.

Workers wearing respirators are required to leave the work area under the following conditions:

- Upon malfunction of the respirator.
- Upon detection of leakage of contaminant into the respirator.
- If increased breathing resistance of the respirator is noted.
- If severe discomfort in wearing the respirator is detected.
- Upon illness of the respirator wearer, including: sensation of dizziness, nausea, weakness, breathing difficulty, coughing, sneezing, vomiting, fever or chills.
- To wash face to prevent skin irritation.
- To change filter/cartridge elements or replace respirators whenever they detect the warning properties of the contaminant or increased breathing resistance.

E. Maintenance

Inspection

1. All respirators shall be inspected before and after each use.
2. Respirator inspection shall include:

- a. Check of the tightness of connections and the condition of the face piece.
- b. Check of condition of the headbands.
- c. Check of condition of the valves.
- d. Check of condition of the filters.
- e. Check of rubber and elastomeric parts for pliability and deterioration.

Cleaning

1. Respirators shall be cleaned after each use.
2. Cleaning procedures shall include:
 - a. Remove and inspect filters.
 - b. Carefully wipe all plastic surfaces with a cleaning pad and a disinfectant.
 - c. Allow respirator to dry approximately 1-2 minutes.
 - d. Inspect all parts; if defective replace with new parts.
 - e. Place respirator in plastic bag and seal for storage.

Repair

During inspection and cleaning, respirators that do not pass inspection will be removed from service and will be discarded or repaired. Repair of the respirator must be done with parts designed for the respirator in accordance with the manufacturer's instructions before reuse. No attempt will be made to replace components or make adjustments, modifications or repairs beyond the manufacturer's recommendation.

Storage

Respirators will be stored in a location where they are protected from sunlight, dust, heat, cold, moisture and damaging chemicals. They shall be stored in a manner to prevent deformation of the facepiece and exhalation valve.

6. TRAINING AND COMMUNICATION

Employees assigned to jobs requiring respirators will be instructed by their supervisor or the Safety & Risk Manager relative to their responsibilities in the Respiratory Protection Program prior to using the respirator. They will also be instructed in:

- The need for the respirator and how improper fit, usage or maintenance can compromise the protectiveness of the respirator.
- The limitations and capabilities of the respirator.
- How to use the respirator effectively in emergency situations, including those in which the respirator malfunctions.
- How to inspect, put on and remove, use and check the seals of the respirator.

- Maintenance and storage procedures.
- How to recognize medical signs and symptoms that may limit or prevent the effective use of respirators.
- When to replace the respirator filters, e.g., when breathing becomes more labored and difficult.

Retraining will be coordinated by the Safety & Risk Manager and will be given at least annually after initial training, or when required due to changes in the workplace or type of respirator that render previous training obsolete, or when suggested by demonstrated inadequacies in the employee's knowledge or use of the respirator or when retraining appears necessary to ensure safe respirator use. Training will be documented using Attachment D. Records of respirator training will be maintained in the Safety & Risk Management Department.

7. PROGRAM EVALUATION

The workplace will be evaluated as necessary by the Safety & Risk Manager to ensure that the provisions of the Respiratory Protection Program are being effectively implemented and that it continues to be effective. Employees required to use respirators shall be consulted to obtain their views on program effectiveness and to identify any problems. Factors to be assessed include, but are not limited to appropriate respirator selection, respirator fit, proper respirator use and proper respirator maintenance.

8. REFERENCES

Title 29, Code of Federal Regulations, Section 1910.134 – Respiratory Protection

ATTACHMENT A

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

Respirators are an effective method of protection against designated hazards when properly selected and worn. Respirator use is encouraged, even when exposures are below the exposure limit, to provide an additional level of comfort and protection for workers. However, if a respirator is used improperly or not kept clean, the respirator itself can become a hazard to the worker. Sometimes, workers may wear respirators to avoid exposures to hazards, even if the amount of hazardous substance does not exceed the limits set by OSHA standards. If your employer provides respirators for your voluntary use, or if you provide your own respirator, you need to take certain precautions to be sure that the respirator itself does not present a hazard.

You should do the following:

1. Read and heed all instructions provided by the manufacturer on use, maintenance, cleaning and care, and warnings regarding the respirators limitations.
2. Choose respirators certified for use to protect against the contaminant of concern. NIOSH, the National Institute for Occupational Safety and Health of the U.S. Department of Health and Human Services, certifies respirators. A label or statement of certification should appear on the respirator or respirator packaging. It will tell you what the respirator is designed for and how much it will protect you.
3. Do not wear your respirator into atmospheres containing contaminants for which your respirator is not designed to protect against. For example, a respirator designed to filter dust particles will not protect you against gases, vapors, or very small solid particles of fumes or smoke.
4. Keep track of your respirator so that you do not mistakenly use someone else's respirator.

ATTACHMENT B

**Palm Beach State College
Respiratory Protection Program**

FIT TEST RECORD

Name: _____ Date: _____

Department: _____ Job Title: _____

Respirator Manufacturer: _____ Model: _____

Respirator Type: _____ Size: _____

Type of Cartridge: _____

Pass	Fail	Test Methods
		Negative Pressure Sealing Check
		Positive Pressure Sealing Check
		Irritant Smoke Test
		Other Test:

Pass	Fail	Test Exercises
		Rainbow Passage
		Head Up & Down
		Head Side to Side
		Normal Breathing
		Deep Breathing
		Talking

Fit Test Conducted By: _____ Organization: _____

Signature: _____

The above-described fit test has been administered to me. I have been instructed in the proper procedures concerning respirator use, care and inspection, and I have voluntarily agreed to the fit test procedures.

Employee Signature: _____ Date: _____

Note: In accordance with OSHA Regulations, a Fit Test Record must be completed upon issuance of a new respirator.

ATTACHMENT C

PALM BEACH STATE COLLEGE

RESPIRATORY PROTECTION PROGRAM MEDICAL EVALUATION QUESTIONNAIRE

Employee's Supervisor: Please complete Part B prior to distributing to the employee.

Employee: Please complete Parts A and C. To maintain confidentiality, return the completed questionnaire in the envelope provided.

PART A: TO BE COMPLETED BY EMPLOYEE

LAST NAME		FIRST NAME		MI	DATE
SEX <input type="checkbox"/> MALE <input type="checkbox"/> FEMALE		JOB TITLE			DATE OF BIRTH
HEIGHT	WEIGHT	WORK PHONE NO.		BEST TIME TO REACH YOU AT THIS NO.	
WORK LOCATION		SUPERVISOR'S NAME		SUPERVISOR'S TITLE	

PART B: TO BE COMPLETED BY EMPLOYEE'S SUPERVISOR

- This section must be completed prior to distributing this form to the employees.
- Please provide the employee with the name and phone number of the physician or nurse responsible for reviewing this questionnaire.
- To maintain confidentiality, please include a return envelope for employee to submit the form to a licensed health care professional for review.

SUPERVISOR'S SIGNATURE	PHONE NO.
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INFORMATION ON RESPIRATOR TO BE WORN BY EMPLOYEE:

TYPE OF RESPIRATOR	DURATION	FREQUENCY OF USE
<input type="checkbox"/> Air Purifying	_____	_____
<input type="checkbox"/> Supplied Air	_____	_____
<input type="checkbox"/> OTHER:	_____	_____

EXPECTED PHYSICAL WORK EFFORT:

- Light Effort (i.e., walking, inspection)
- Moderate Effort (i.e., manual labor to include tool use and lifting < 25 lbs)
- Heavy Effort (i.e., fire fighting, ladder climbing, emergency response duties and lifting > 25 lbs)

ADDITIONAL PROTECTIVE CLOTHING AND EQUIPMENT TO BE WORN:

TEMPERATURE AND HUMIDITY EXTREMES THAT MAY BE ENCOUNTERED:

- Extreme Cold (below 30° F) Dryness Humidity (above 90%)
- Extreme Heat (above 100° F) Wetness Other

PART C: TO BE COMPLETED BY EMPLOYEE

- To maintain confidentiality, please return the completed questionnaire in the envelope provided.
- Per OSHA 29 CFR 1910.134 respirator standards, if you have been selected to wear a respirator, you must answer the following questions:

Has your employer told you how to contact the health professional who will review this questionnaire? Yes No

Can you read? Yes No Have you worn a respirator previously? Yes No

If yes, what type(s)? _____

Have you worn a respirator during fit testing? Yes No

Check the type(s) of respirator you will use: N, R, or P Disposable Respirator Other (Half Face, Full Face, Supplied Air)

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?

- A. Seizures (Fits) Yes No D. Claustrophobia (fear of closed-in places) Yes No
- B. Diabetes (sugar disease) Yes No E. Trouble smelling odors Yes No
- C. Allergic reactions that interfere with your breathing Yes No

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

- A. Asbestosis Yes No G. Silicosis Yes No
- B. Asthma Yes No H. Pneumothorax (collapsed lung) Yes No
- C. Chronic bronchitis Yes No I. Lung cancer Yes No
- D. Emphysema Yes No J. Broken ribs Yes No
- E. Pneumonia Yes No K. Any chest injuries or surgeries Yes No
- F. Tuberculosis Yes No L. Any other lung problem that you've been told about Yes No

4. Do you currently have any of the following symptoms of the pulmonary or lung disease?

- A. Shortness of breath Yes No
- B. Shortness of breath when walking fast on level ground or walking up a slight hill or incline Yes No
- C. Shortness of breath when walking with other people at an ordinary pace on level ground Yes No
- D. Have to stop for breath when walking at your own pace on level ground Yes No
- E. Shortness of breath when washing or dressing yourself Yes No
- F. Shortness of breath that interferes with your job Yes No
- G. Coughing that produces phlegm (thick sputum) Yes No
- H. Coughing that wakes you early in the morning Yes No
- I. Coughing that occurs mostly when you are lying down Yes No
- J. Coughing up blood in the last month Yes No
- K. Wheezing Yes No
- L. Wheezing that interferes with your job Yes No
- M. Chest pain when you breathe deeply Yes No
- N. Any other symptoms that you think may be related to lung problems Yes No

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

- A. Heart attack Yes No
- B. Stroke Yes No
- C. Angina Yes No
- D. Heart failure Yes No
- E. Swelling in your legs or feet (not just from walking) Yes No
- F. Heart arrhythmia (heart beating irregularly) Yes No
- G. High blood pressure Yes No
- H. Any other heart problems you've been told about Yes No

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

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

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

- A. Breathing or lung problems Yes No
- B. Heart trouble Yes No
- C. Blood pressure Yes No
- D. Seizures (fits) Yes No

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

- A. Eye irritation Yes No
- B. Skin allergies or rashes Yes No
- C. Anxiety Yes No
- D. General weakness or fatigue Yes No
- E. Any other 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

IF YOU ARE SELECTED TO WEAR A FULL FACEPIECE RESPIRATOR OR SELF-CONTAINED BREATHING APPARATUS (SCBA), PLEASE ANSWER THESE ADDITIONAL QUESTIONS.

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?

- A. Wear contact lenses Yes No
- B. Wear glasses Yes No
- C. Color blind Yes No
- D. Any other eye or vision problems 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?

- A. Difficulty hearing Yes No
- B. Wear a hearing aid Yes No
- C. Any other hearing or ear problems Yes No

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

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

- A. Weakness in any of your arms, hands, legs, or feet Yes No
- B. Back pain Yes No
- C. Difficulty fully moving your arms and legs Yes No
- D. Pain or stiffness when you lean forward or backward at the waist Yes No
- E. Difficulty fully moving your head up or down Yes No
- F. Difficulty fully moving your head side to side Yes No
- G. Difficulty bending at your knees Yes No
- H. Difficulty squatting to the ground Yes No
- I. Climbing a flight of stairs or a ladder carrying more than 25 lbs. Yes No
- J. Any other muscle or skeletal problems that interferes with using a respirator Yes No

PART D: LICENSED HEALTH CARE PROFESSIONAL

Exam Required Cleared For Respirator Use Not Cleared For Respirator Use Personal Egress/Self Evacuation Only

Comments: _____

PHYSICIAN OR LICENSED HEALTH CARE PROFESSIONAL NAME (PRINT)	SIGNATURE	DATE
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ATTACHMENT D

**Palm Beach State College
Respiratory Protection Program**

TRAINING RECORD

This is to verify that I attended training as required by OSHA's Respiratory Protection Standard (29 CFR 1910.134). The training included:

- 1. The types of respirators and their selection.**
- 2. The proper use and limitations of respirators.**
- 3. Fitting instructions, including demonstrations and practice in how the respirator should be worn and how to determine if it fits properly.**
- 4. Inspection of the respirator before use.**
- 5. The proper methods of cleaning and disinfecting respirators.**
- 6. The proper storage of respirators.**
- 7. Identification of respirator canisters.**
- 8. The opportunity to ask questions, provide views on program effectiveness and identify problems.**

I have been informed who to contact if future questions arise and who to inform if I believe a situation is unsafe.

I have read and understand the above statements.

Date: _____ **Time:** _____ **Location:** _____

Instructor: _____

Employee Name: _____

Job Title: _____ **Campus:** _____

Initial Training: YES/NO **Refresher Training:** YES / NO

Signature: _____