

TO: ALL COUNTY PERSONNEL

FROM: VERDENIA C. BAKER
COUNTY ADMINISTRATOR

PREPARED BY: RISK MANAGEMENT / EMPLOYEE SAFETY / LOSS
CONTROL (ES/LC)

SUBJECT: RESPIRATORY PROTECTION PROGRAM (RPP)

PPM#: CW-P-068

ISSUE DATE
August 1, 2024

EFFECTIVE DATE
August 1, 2024

PURPOSE:

To ensure that respirators are appropriately selected, used, maintained and that employees are protected from exposure to occupational inhalation hazards.

UPDATES:

Future updates to this PPM are the responsibility of the Director of Risk Management.

AUTHORITY:

- Occupational Safety and Health Administration (OSHA) Standard 29 CFR 1910.134, as may be amended.
- OSHA Standard 49 CFR 173 & 178, as may be amended.
- National Institute of Occupational Safety and Health (NIOSH), as may be amended.
- American National Standards Institute (ANSI), as may be amended.
- Compressed Gas Association (CGA), as may be amended.
- Florida Statutes (F.S.), Chapter 440, Florida Workers' Compensation, as may be amended.

DEFINITIONS:

For definitions, see Attachment A.

POLICY

When potential inhalation exposures cannot be maintained safely below-recognized exposure limits through the use of engineering (e.g. ventilation/substitution, etc.) or administrative control measures (e.g. limiting exposure time through worker rotation), respirator protection will be

provided and used by employees. The Respiratory Protection Program (RPP) ensures that the respirators are properly selected, used, maintained, and only worn by employees who are able to wear respiratory protective equipment safely. Employees who cannot wear respiratory protective equipment properly, shall not engage in the potentially hazardous work.

RESPONSIBILITIES:

Employee Safety/Loss Control (ES/LC) has the overall planning and managing responsibility for the RPP. Specific responsibilities are as follows:

1. Department/Division Directors shall:

- a. Ensure that supervisors and employees adhere to the requirements of the RPP.
- b. Ensure that supervisors and employees participate in training and fit testing.
- c. Support implementation of necessary engineering/work practice controls to reduce inhalation hazards.

2. Supervisors shall:

- a. Ensure that engineering controls are used and maintained to protect employees when available.
- b. Ensure that employees use, inspect, clean, and maintain their respirator equipment in accordance with this PPM.
- c. Ensure that Employees within the RPP are medically cleared by the Occupational Health Clinic (OHC) prior to entering the program and then re-evaluated at intervals determined by the OHC or immediately if their ability to participate in the program is impacted due to a medical condition. At no point should medical re-evaluations by the OHC exceed 5 years.
- d. Ensure that breathing air quality meets the requirements in accordance with this procedure (for supplied air respirators).
- e. Ensure that employees receive respirator fit-testing (as applicable) and respirator training.
- f. Contact ES/LC to evaluate work environments, or work practices, and processes.
- g. Contact ES/LC whenever a new hire is needing to be evaluated for inclusion in the RPP. Coordination will be made to ensure the new hire is properly fit-tested and trained on proper respirator use.

3. Employees shall (as applicable):

- a. Adhere to the procedures of the RPP by participating in training, receiving annual fit-testing, and correctly wearing appropriate respiratory protection when it is a requirement of the job.
- b. Inspect, clean, maintain, and store their respiratory protective devices, cartridges, and/or filters in accordance with the RPP. To include, the replacement of respirator cartridges and filters as per manufacturer recommendations and specific job tasks.
- c. Perform positive and negative seal checks whenever wearing the respirator and leave the work area if the respirator, cartridges, and/or filters malfunction.
- d. Ensure that facial hair is not present between the face and sealing surface of a tight-fitting respirator.
- e. Ensure that clothing, eyewear, and jewelry does not interfere with the seal of the respirator.
- f. Properly use and maintain engineering controls when applicable.
- g. Participate in medical clearance through the OHC prior to entering the RPP and then re-evaluated at intervals determined by the OHC or immediately if their ability to participate in the program is impacted due to a medical condition. At no point should medical re-evaluations by the OHC exceed 5 years.

4. PBC Occupational Health Clinic/Professional License Health Care Provider (PLHCP) shall:

- a. Administer and evaluate employee's completed Medical Questionnaire in accordance with the RPP to determine the employee's ability to use respiratory protective equipment.
- b. Forward Respirator Approval Form to ES/LC immediately upon completion.
- c. Confidentially notify supervisor and ES/LC when an employee is unable to use a respirator or has restrictive use of a respirator.

5. ES/LC shall:

- a. Conduct initial worksite evaluations to determine the inhalation hazards and reassess worksite evaluations at the request of a supervisor and as necessary to reflect changes in worksite conditions that affect the on-site employees and their individual respirator use.

- b. Determine if engineering controls are feasible to control and/or minimize inhalation hazards and make recommendations as needed.
- c. Determine the type of respiratory protection equipment that may be required based on the hazard evaluation.
- d. Provide air-purifying respirators to departments (except Fire Rescue) that have inhalation risks due to the nature of the work performed for mandatory use.
- e. Determine mandatory vs. voluntary use for appropriate departments.
- f. Provide annual fit testing and training in accordance with the RPP.

PROCEDURES:

1. Respirator Selection

- a. Based on worksite evaluations and types of hazards to which employees may be exposed, employees will be selected for inclusion in the RPP and the type of respiratory equipment shall be selected and approved by ES/LC.
- b. Based on exposure assessment, ES/LC shall determine mandatory vs. voluntary use of respirators.
- c. All respirators will be supplied by ES/LC with the exception of :
 - Self-Contained Breathing Apparatus (SCBA) and Air Purifying Respirators for Fire-Rescue.
 - Disposable filtering face pieces (dust masks) for voluntary use. These may be purchased by the user department only with the authorization and approval of ES/LC.

2. Medical Evaluation

- a. As applicable, employees shall undergo a medical evaluation by the PBCOHC-approved outside physician, or PLHCP to determine the employee's physical ability to use a respirator before being fit-tested or required to use the respirator in the workplace.
- b. The employee shall complete the medical questionnaire (OSHA 29 CFR 1910.134 Appendix C) supplied to them by the PBC OHC or the PLHCP during normal work hours.
- c. The PBC OHC physician will make the final determination of the ability to use a respirator, restrictions of use, and the need and frequency for follow-up medical

evaluations. The PLHCP shall notify the user's supervisor and ES/LC when an employee is unable to use or has restrictive use of respiratory equipment.

d. Additional medical evaluations will be performed when:

- An employee reports medical signs or symptoms that are related to his/her ability to use respiratory equipment.
- A PLHCP, supervisor or the RPP administrator determines that an employee needs to be re-evaluated.
- Observations and assessments during fit-testing and program evaluation indicate a need for employee re-evaluation.
- A change in workplace conditions (e.g., physical work effort, protective clothing, temperature) that may result in a substantial increase in the physiological burden placed on the employee.

3. Fit Testing

- a. ES/LC will coordinate all respirator fit-testing for PBC employees and determine the type of fit-testing and method of implementation.
- b. PBC employees that are required to use a filtering face piece, half-face, or full-face respirator (positive or negative pressure) will undergo fit-testing prior to initial use. The make, model, style, and size used will coincide with the respirator recommendation given by a PLHCP or ES/LC. Employees will be fit-tested with the same respirator that was dispensed to them for their exclusive use.
- c. Fit-testing will occur annually and when a new make, model, style, or size is required. The employee, supervisor, RPP administrator, or PLHCP can recommend additional fit-testing based on visual observations of changes in the employee's physical condition (i.e., facial scarring, dental changes, cosmetic surgery, or weight gain/loss) that could affect the fit of the respirator. Also, changes in work practices or tasks may warrant review of the type of respirator used.
- d. For Fire Rescue only, fit testing may be conducted by (FR) support services personnel who are properly trained and experienced to conduct reliable testing.

4. Use of Respirators

- a. To ensure face piece seal protection and continued respirator effectiveness, respirators must be used properly and in accordance with the manufacturer's instructions and this PPM.

- b. A user seal check (fit-check) shall be performed for required use of tight-fitting respirators and filtering face pieces each time it is worn by the user.
- c. Employees will not be permitted to wear any filtering face piece or tight-fitting respirator when they have:
 - Facial hair (e.g., a beard) that comes between the sealing surface of the face piece and the face or that interferes with respirator valve function.
 - Any condition that interferes with the face-to-face piece seal or valve function (e.g., missing dentures, facial scarring, jewelry).
- d. Other Personal Protective Equipment (PPE) including corrective glasses shall be worn in a manner that does not interfere with the face-to-face piece seal of the respirator. ES/LC will assist the employee and their department in obtaining special corrective lenses for employees who wear prescription eyeglasses and who are required to use full-face respirators. A request for re-evaluation of the type of respirator equipment used may be made by the employee, supervisor, or RPP administrator if workplace conditions or job tasks change at any time.
- e. The employee shall leave the work area:
 - To wash their face and respirator as necessary to prevent eye and skin exposure
 - If vapor or gas breakthrough is detected in the respirator
 - If there are changes in breathing resistance or leakage of the respirator
 - To replace filters/cartridges or the respirator/face piece
- f. ES/LC shall replace or repair any malfunctioning respirator before an employee can return to the work area. The respiratory equipment shall be used only for the process/task for which it was evaluated. Employees will use their respiratory equipment only under the conditions specified from when fit-testing and training occurred.
- g. Employees will mark the date of first use on the cartridge and change cartridges and/or filters as per training for their respiratory equipment and specific job tasks.
- h. Cartridge packages will be opened and cartridges affixed to respirator only when ready to be used. Otherwise, cartridges should be maintained in sealed packaging or a seal-proof plastic bag.

5. Respiratory equipment shall not be altered or used in a manner for which it is not National Institute of Occupational Safety and Health (NIOSH) certified or intended by its manufacturer.
Maintenance and Care of Respirators

- a. To ensure adequate protection, respirators must be properly cleaned, disinfected, stored, inspected, and repaired.
- b. The employee shall clean and disinfect his/her respirator as often as necessary to be maintained in a sanitary condition.
- c. The employee shall store his/her respirator in a moisture-proof bag (e.g., plastic) away from sunlight, extreme temperatures, contaminants, moisture, dust, and chemicals.
- d. The respiratory equipment should be stored in its appropriate storage container and every attempt should be made to ensure the form of the respirator is not changed.
- e. The employee shall inspect the function (seal check) and all components (e.g., valves, straps, tubing, filters, cartridges, etc.) of the respirator before each use.
- f. Defective equipment shall be removed from service. In the case of Fire Rescue, Support Services technicians shall repair and maintain respiratory equipment.

6. Breathing Air Quality and Use

- a. Departments with stationary or portable breathing air systems (e.g. compressors) as the breathing air source shall test the air system at intervals no longer than three months and document, retain, and make available for review the results of the air quality data. (Fire Rescue)
- b. Testing will determine, at a minimum, whether the air meets the requirements for Type 1-Grade D breathing air described in American National Standards Institute (ANSI)/Compressed Gas Association (CGA) Commodity Specification for Air, G-7.1. The specifications include:
 - Oxygen content of 21%
 - Hydrocarbon (condensed) content of five (5) milligrams per cubic meter of air or less
 - Carbon Monoxide content of 10 ppm or less
 - Carbon Dioxide content of 1,000 ppm or less
 - Lack of noticeable odor

- c. Cylinders used to supply breathing air to respirators(SCBA and/or SCUBA) shall meet the following requirements:
- Cylinders shall be tested and maintained as prescribed in the Shipping Container Specification Regulations of the Department of Transportation (49 CFR part 173 and 178).
 - Cylinders of purchased breathing air have a certificate of analysis from the supplier that the breathing air meets the requirements for Type 1 – Grade D breathing air.
 - The moisture content in the cylinder does not exceed a dew point of -50 °F (-45 °C) at 1 atmosphere pressure.
 - All Cylinders must be hydrostatically tested based on manufacturer guidelines within a maximum interval of five (5) years.
- d. Compressors used to supply breathing air to respirators must be maintained on a preventive maintenance schedule as prescribed by the compressor manufacturer. They must be constructed and situated so as to:
- Prevent entry of contaminated air into the air-supply system.
 - Minimize moisture content so that the dew point at one (1) atmosphere pressure is 10 °F (5.56 °C) below the ambient temperature.
 - Have suitable in-line air-purifying sorbent beds and filters to further ensure breathing air quality. Sorbent beds and filters must be maintained and replaced or refurbished periodically following the manufacturer's instructions.
 - Have a tag containing the most recent change date and the signature of the person authorized by the employer to perform the change. The tag must be maintained at the compressor.
 - All cylinders must be properly stored in an upright position, inside a manufacturer-approved crate, or chained to a wall to protect it from falling over. Additionally, if not actively connected, all valves must be capped and kept in a temperature-regulated area which is not in direct sunlight.
- e. For compressors that are not oil-lubricated, the carbon monoxide levels in the breathing air must not exceed 10 ppm. Continuous monitoring for carbon monoxide must be conducted to ensure that levels are kept below 10 ppm.

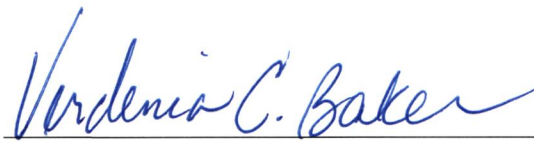
- f. For oil-lubricated compressors, a high temperature or carbon monoxide alarm, or both, will be used to monitor carbon monoxide levels. If only high temperature alarms are used, the air supply must be monitored at intervals sufficient to prevent carbon monoxide in the breathing air from exceeding 10 ppm.
- g. For airline respirators, breathing air couplings must be incompatible with outlets for non-respirable worksite air or other gas systems. No asphyxiating substance will be introduced into breathing air lines.

7. Training and Information

- a. ES/LC shall provide/coordinate training before initial use and as often as needed to ensure the safe use of respiratory equipment for employees who are required to use it.
- b. Respirator training will include:
 - Information on the inhalation hazards at the worksite.
 - Why the respirator is necessary and how improper fit, usage, or maintenance can compromise the protective components of the respirator which protects the user
 - What the limitations and capabilities of the respirator are.
 - How to use the respirator effectively and in situations where the respirator equipment could malfunction.
 - When to change cartridges (replacement out schedule) and filtering media.
 - How to inspect, proper donning and doffing procedures, and how to inspect the serviceability of the respirator seal.
 - How to recognize medical signs and symptoms that may limit or prevent effective use of respirators.

8. Recordkeeping

- a. The medical questionnaire and other records shall be maintained as part of the employee's medical record by OHC.
- b. The respirator approval form and fit-testing results and information shall be maintained by ES/LC in accordance with the ES/LC Records Retention Policy.



VERDENIA C. BAKER
COUNTY ADMINISTRATOR

Supersession History:

1. PPM # CW-P-068, effective 10/4/1999
2. PPM # CW-P-068, effective 11/21/2011
3. PPM # CW-P-068, effective 07/15/2016

ATTACHMENT A

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.

Atmosphere-Supplying Respirator - 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.

Cartridge - A device that contains a filter, sorbent or catalyst, or combination of these items, which removes specific contaminants from the air as it passes through the device.

Dust Mask (i.e. filtering face piece) – A paper or fiber particulate mask where the face piece constitutes the filter media, i.e., the mask does not utilize replaceable filters or cartridges.

Filter Oil Resistance Designation: (N-R-P) – These designations for filters/filtering face pieces states the degree of oil resistance. “N” is not resistant to oil, “R” is somewhat resistant, and “P” is oil proof.

Filter or Air-Purifying Element – A component used in respirators to remove solid or liquid aerosols from the inspired air.

Fit-Test – The use of a protocol to qualitatively or quantitatively evaluate the fit of a respirator on an individual user.

Fit-Check (i.e. Seal Check) – An action conducted by the respirator user, after donning to determine if the respirator is properly seated to the face.

Full-Face Respirator – An air-purifying device similar to a half-face respirator with the addition of a lens that protects the eyes and face.

Half-Face Respirator – (i.e. half-mask respirator) – An air purifying device that covers the nose, mouth, and chin. These air-purifying devices use replaceable filters and/or cartridges that capture the airborne contaminant before they enter the airway.

Hood – 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) – Acute respiratory exposure that poses an immediate threat of loss of life, immediate or delayed irreversible adverse effect on health, or acute eye exposure that would prevent escape from a hazardous atmosphere.

Inhalation Hazard – An overexposure to products of combustion, toxic gases, vapors, or dust, potentially explosive or oxygen-deficient atmospheres, or any condition(s) that create(s) a hazard to the respiratory system.

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

N-95 / R-95 / P-95 - The designation for filtering elements that correspond to 95 percent efficiency at 0.1 – 0.3 micron particles.

N-100 / R-100 / P-100 - The designation for filtering elements that correspond to 99.97 percent efficiency at 0.3-micron particles.

Oxygen Deficient Atmosphere – An atmosphere with oxygen content below 19.5% by volume.

Powered Air-Purifying Respirator (PAPR) – An air-purifying respirator that uses a blower to force the ambient air through air-purifying elements (i.e. filter and/or cartridge) to a half or full-face respirator, hood, or other approved head covering.

Respiratory Protection Equipment – Those devices that are designed to protect the respiratory system from exposure to harmful levels of airborne agents such as gases, vapors, fumes, or particulate matter.

Self-Contained Breathing Apparatus (SCBA) – An atmosphere supplying respirator for which the breathing air source is designed to be carried by the user.

Supplied-Air Respirator – 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. A SAR or SCBA is attached to an air line that supplies clean air through a hose that is attached to a powered air pump, compressor, or tank of compressed air. Air will either flow into the respirator as one inhales or flows continuously into a respirator hood or through an approved head covering.

Tight-Fitting Face Piece - A respirator that forms a complete seal around the covered area of the face.

Voluntary Respirator Use – An elective use of a respirator by an employee when a qualitative and/or quantitative industrial hygiene exposure assessment indicates that no inhalation hazard exists.