



RESPIRATORY PROGRAM (MANDATORY)

Purpose, Objective & Scope

- **Purpose:** Fulfilling the requirements of 29 CFR 1910.134 Appendix D.
- **Objective**
 - The Aircorps Aviation objective is to control the exposure to harmful air that may cause death, disease, or irritation caused by inhalation of harmful dust, fumes, sprays, mist, fog, smoke, vapors, or gasses.
 - Our main employee exposure is Hexavalent Chromium in the paint department and welding department.
 - Air was monitored during employee welding operations and paint operations; the result was below the action level on two occasions, seven days apart. Dust generated in the production area and welding fumes are not considered significant.
- **Scope**
 - The Responsibility, Selection, Use, Maintenance and Care of respirators. This program pertains to mandatory use of respirators. Workplace areas where the PEL is exceeded mandatory use will be required.

Responsibility

- **Safety Manager**
 - Approves Company Mandatory Use Respirator Program.
 - Understands the purpose, objectives and scope of the company Mandatory Use Respirator Program.
 - Requires annual training is attended by all affected employees.
 - Communicates with managers with enough notice of employees requiring training, fit test, medical exams, etc.
 - Maintains all medical qualification documents for the length of employee employment
- **Manager**
 - Understands the purpose, objectives and scope of the company Mandatory Use Respirator Program.
 - Determines proper respirator type is in use.
 - Ensures respirator medical qualification questionnaire and or medical exams are completed for affected employees.
 - Ensures employees that use a respirator have a medical release signed by a physician certifying the employee is physically able to use a respirator and a respirator fit test is done.
 - Respirators issued by the company or brought from home by the employee must be permanently labeled with the employee's name and used only by that employee.
 - Ensures that the employees store respirator in a plastic bag or covered container that protects them from dust, sunlight, heat, extreme cold, moisture or damaging chemicals.

- Respirators will be cleaned and disinfected often to mitigate the risk of respiratory illnesses. (1 part unscented Bleach to 100 parts clean Water).
- **Employee**
 - Understands the purpose, objectives and scope of the company Mandatory Use Respirator Program.
 - Ensures if they use a respirator they have a medical release signed by a physician certifying the employee is physically able to use a respirator and a respirator fit test is done.
 - Ensures that they store respirator in a plastic bag or covered container that protects them from dust, sunlight, heat, extreme cold, moisture or damaging chemicals.
 - Respirators issued by the company or brought from home by the employee must be permanently labeled with the employee's name and used only by that employee.
 - Respirators will be cleaned and disinfected often to mitigate the risk of respiratory illnesses. (1 part unscented Bleach to 100 parts clean Water).
 - Cooperates with the Mandatory Respirator Program when asked to complete a mask fit test, annually fill out a medical questionnaire and complete a pulmonary exam if requested to do so by a certifying physician.
 - Attends annual training.
 - Use and care for respirator according to manufacturer's instructions and training.
 - Respirators must be inspected before and after each use to ensure proper working order.
 - Respirator pre and post use inspection should include:
 - Check tightness of connections.
 - Check the face piece for damage.
 - Check the valves for security, damage and proper operation.
 - Check for proper cartridge designed for the airborne hazard that is present.
 - Cleaning of Rubber Inlet
 - Adhere to manufacturer's recommended cleaning procedures.

Selection

- **Process**
 - Aircorps Aviation will assist employees in selecting the type of respirator needed for the airborne hazard that is present.
 - The company will provide a respirator in a Mandatory use situation.
 - Selection of a respirator will be determined by the hazardous operation or process being completed, the types of contaminants present and the activity of the employee wearing the respirator.
- **Classes of Mandatory Respirator Protection Devices Permitted**
 - Air Purifying Respirators:
 - Mechanical Filter – for the removal of particulate contaminants through a fibrous media. Examples of particulates are non-volatile dust, fumes, mists and or any combination of them. When particulates are greater than TWO micrometers, any particulate filter certified by NIOSH can be used.

- Chemical Cartridge – for use in atmospheres of gas and vapor concentrations not over 0.1% by volume.
 - Combination – Provides protection from a mixture of Particulates, Gas and Vapor.
- **Evaluation**
 - The Mandatory Respiratory Protection Program will be reviewed annually.
 - Evaluation of employee's respirator use shall include the following:
 - Interference with vision and communication.
 - Restriction of movement.
 - Interference with job performance.
 - Health issues created or aggravated by use.
- **Monitoring**
 - Monitoring of the work area air quality and the employees exposed to respiratory hazards must be reviewed periodically.
 - When air contaminant sampling is done, it must be taken in the respirator wearer's breathing zone (10 inch radius of the nose and mouth). Results of sampling will be used to determine if Mandatory use is applicable.
- **Medical**
 - A Physician or other licensed health care professional shall evaluate the user of all close fitting respirators.
 - Employees will not be assigned to jobs requiring the use of a respirator unless a physician certifies the employee is able to use the respirator equipment.
 - The evaluation must be done before fit testing.
 - A follow up medical exam will be required if the evaluator requests it based on questionnaire / evaluation responses.
 - Aircorps Aviation will furnish the evaluator the following information:
 - Type/weight of respirator
 - Duration/frequency of use
 - Physical work effort
 - Protective clothing/equipment worn
 - Workplace temperature/humidity extremes any other significant information.
 - The medical status of the employee will be reviewed annually.
 - Medical questionnaires are confidential.
 - Additional medical evaluation will be required if the following occurs:
 - Employee reports medical signs or symptoms related to respirator use.
 - The evaluator requests it based on questionnaire / evaluation responses.
 - Required by MN OSHA.
 - Observations made during the fit test.
 - Changes in workplace conditions that result in a substantial burden.

Use of Respirators

- **Use**
 - Aircorps Aviation does require employees to wear respirators where the exposure is at or above action level limits.
 - All employees are permitted to voluntarily wear respirators if medically able, where the exposure is below action level limits.

- **Voluntary Use**
 - Voluntary respirator use is permitted where the exposure is below the action level limits.
 - Where the company chooses not to provide a respirator the employee is permitted to furnish and use their own.
 - Voluntary respirator use will not be permitted if it creates a hazard to the employee.
 - When the company or the employee furnishes the respirator, the employee is required to do the following:
 - Read and follow the manufacturer's instructions for use, care and limitations of the respirator before use.
 - Can only use a certified respirator designed to protect against the known contaminant and atmosphere.
 - Securely store the respirator so other employees cannot use it.
 - Ensure that employees are medically cleared to use the respirator.
- **Issuance**
 - Respirators issued by the company or brought from home by the employee must be permanently labeled with the employee's name and used only by that employee.
- **Training**
 - Training of respirator wearers in the proper use of respirator will be provided by AirCorps Aviation.
 - It is the responsibility of the employee to wear the respirator correctly.
 - New employee training will take place before respirator use.
 - Training is annual.
 - Retraining is required when previous training becomes obsolete or when improper use of respirators is discovered.
 - Respirator Protection training will include the following:
 - How improper use and fit can compromise the ability of the respirator to protect the user effectively.
 - Demonstration of the operation, capabilities and limitations of the respirator.
 - Visual Inspection, fit, put on, take off, operational inspection and proper wearing.
 - How to recognize medical signs and symptoms that may limit or prevent the effective use of a respirator.
 - Discuss cleaning, maintenance and storage of respirator.
- **Face Seal**
 - AirCorps Aviation shall not permit respirators with tight-fitting facepieces to be worn by employees who have:
 - Facial hair that comes between the sealing surface of the facepiece and the face or that interferes with valve function; or any condition that interferes with the face-to-facepiece seal or valve function.
 - If an employee wears corrective glasses or goggles or other personal protective equipment, the employer shall ensure that such equipment is worn in a manner that does not interfere with the seal of the facepiece to the face of the user.
 - For all tight-fitting respirators, the employer shall ensure that employees perform a user seal check each time they put on the respirator

- **Fit Test**
 - Before an employee may be required to use any respirator with a negative or positive pressure tight-fitting facepiece, the employee must be fit tested with the same make, model, style, and size of respirator that will be used.
 - AirCorps Aviation shall ensure that employees using a tight-fitting facepiece respirator pass an appropriate qualitative fit test (QLFT) or quantitative fit test (QNFT).
 - AirCorps Aviation shall ensure that an employee using a tight-fitting facepiece respirator is fit tested prior to initial use of the respirator, whenever a different respirator facepiece (size, style, model or make) is used, and at least annually thereafter.
- **Toxic Atmosphere**
 - *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.
 - AirCorps Aviation employees are not allowed to ever enter 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.
- **Program Effectiveness**
 - AirCorps Aviation will review operations for significant changing conditions and employee stress.
 - Employees may need to wash faces and respiratory face piece to prevent eye or skin irritation.
- **Program Evaluation**
 - Annual Evaluation and review.

Maintenance

- **Inspections**
 - Respirators should be inspected before and after each use, to ensure proper operation.
 - Respirator inspection should include:
 - Check tightness of connections.
 - Check the face piece for damage.
 - Check the valves for security, damage and proper operation.
 - Check for proper cartridge designed for the airborne hazard that is present.
 - Check for improper installation of the valve in the valve body.
 - Check for missing or worn gaskets or cross threading in the holder.
 - Check for expired shelf life date on cartridge or canister.
 - Check for cracks or dents in the outside case of the filter, cartridge or canister.
 - Check for evidence of prior use of cartridge or canister, indicated by the absence of sealing material, tape, foil. etc. over outlet
 - If a minor defect is found during inspection, repair, cleaning or adjustment the respirator should be corrected immediately.
 - The company does not have an emergency escape only respirator.

- **Cleaning**

- The employee will be trained on the cleaning procedures for the respirator.
- Cleaning Procedures – Best practice:
 - Monthly the respirator will be disassembled, washed in warm soapy water of 120 degrees Fahrenheit, using a brush.
 - The Respirator will be thoroughly rinsed and sanitized for 2 minutes using a solution of hydrochloride or (2 tablespoons of bleach per gallon of water).
 - Washing is required more than monthly to maintain it in sanitary condition, so respirators will be wiped daily with alcohol wipe.
 - The respirator should be air dried on a clean surface, thus avoiding damage to the face piece.
 - Reassemble and inspect the respirator.
 - Clean respirators should be stored in sealed plastic bags in a clean, dry location away from direct sunlight.

- **Repairs and Adjustment**

- The repairs or replacement of parts should be done with OEM parts designed for the respirator. These repairs will be done only by the employee who wears the respirator voluntarily.
- No replacement components, adjustment or repairs beyond the manufacturer's recommendations should be made by the employee.
- Defective respirators should be taken out of service and not used.

- **Storage**

- Ensure that you store a respirator in a plastic bag or covered container that protects them from dust, sunlight, heat, extreme cold, moisture or damaging chemicals.
- Respirators will be stored in a single layer and placed so that the facepiece and exhalation valve will rest in a near normal position.
- Respirators will not be stored in tool boxes or lockers unless they are protected from contamination, distortion and damage.