U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION

Air Traffic Organization Policy

ORDER JO 3900.80

Effective Date
07/25/2022

SUBJ: Air Traffic Organization (ATO) Respiratory Protection Program (RPP)

1. This order establishes the Air Traffic Organization (ATO) Respiratory Protection Program. The goal of this policy order is to provide the Occupational Safety and Health Administration required written program plan when respiratory protection is required in the workplace. This RPP is a foundation document and must be supplemented with procedures, assigned points of contact, and details to meet the workplace-specific respirator assignment and use.

2. ATO Service Units are required to issue workplace-specific procedures when assigning respirators and are permitted to develop additional supporting documentation to supplement this order.

ANGELA RENEE MCCULLOUGH

Digitally signed by ANGELA RENEE MCCULLOUGH
Date: 2022.07.25 16:08:18 -04'00'

Timothy L. Arel
Acting Chief Operating Officer Air Traffic Organization

RECORD OF CHANGES DIRECTIVE NO. 3900.80

CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL USE	CHANGE TO BASIC	SUPPLEMENTS			OPTIONAL USE

FAA Form 1320-5 (6-80) USE PREVIOUS EDITION

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Chapter 1. General Information

1. Purpose of This Order. This order establishes Air Traffic Organization (ATO) policy, roles and responsibilities, and assigns broad ATO responsibilities to ensure compliance with the Occupational Safety and Health Administration (OSHA) respiratory protection requirements and related regulations as noted within this document. The goal of this policy is to provide a written plan when respiratory protection is required in the workplace.

2. Audience. This order applies to all ATO employees.

3. Where Can I Find This Order? You can find this order on the Directives Management System website: https://employees.faa.gov/tools_resources/orders_notices/. Or go to MyFAA Employee Website, select 'Tools and Resources' then select 'Orders and Notices'. This order may be found on the ATO Environmental, Occupational Safety, and Health (EOSH) Toolbox Respiratory Protection Program (RPP) website where additional supporting documentation including points of contact, Standard Operating Procedures (SOP), Job Aids, and Forms are posted, https://my.faa.gov/org/linebusiness/ato/operations/atc_facilities/eosh_services.html.

4. OSH Policy References. The ATO must comply with OSHA regulations. Specific ATO Environmental, Occupational Safety, and Health (EOSH) policies have unique requirements and may include state and local regulations, where applicable. Questions on the applicability of state and local EOSH requirements should be referred to the Office of the Chief Counsel for an evaluation of the supremacy clause and sovereign immunity implication. The nature of this directive requires reference to numerous publications. To avoid frequent order revision for changing references to the latest issue, employees should consider all references as the most recent published edition unless stipulated by law.

a. Code of Federal Regulations (CFR). CFR titles and sections include, but are not limited to the following requirements found within the OSHA Respirator Protection Standard: 29 CFR Part 1910.134 Respiratory Protection.

b. Federal Aviation Administration (FAA) Orders. ATO employees must follow all FAA orders. This order provides supplemental ATO Policy under FAA Order 3900.19 Occupational Safety and Health Policy.

5. Roles and Responsibilities. All roles are ATO employees unless specifically mentioned in the order.

a. ATO Executive-level Management. ATO Executive-level Management must:

(1) Ensure all levels of management are aware of and perform ATO RPP responsibilities to provide a safe and healthful workplace for employees.

(2) Ensure adequate funds and resources are identified to implement the ATO RPP. If funds are unavailable and/or mitigation procedures are not feasible, the ATO must not allow employees to enter workplaces which require respiratory protection.

(3) Designate a Service Unit (SU) RPP Lead or other applicable RPP Lead who will coordinate SU RPP requirements if employees are assigned respirators.

(4) Ensure Safety and Health Specialists are sufficiently trained to identify, assess, and control airborne hazards and make appropriate decision on respirator assignment and use.

b. ATO EOSH Services Group Manager. The ATO EOSH Services Group Manager must:

(1) Designate a RPP Lead who will lead the ATO RPP.

(2) Ensure the ATO RPP Lead is provided the resources required to serve as the Office of Primary Responsibility (OPR) for this order.

c. ATO RPP Lead. The ATO RPP Lead must:

(1) Serve as the OPR to revise this order.

(2) Provide the ATO RPP technical guidance.

(3) Coordinate with and provide technical assistance to AJW-23 EOSH Training Program on ATO RPP training requirements.

(4) Develop, disseminate, and revise as necessary ATO RPP supplemental documents to this order including ATO SOPs and forms.

(5) Coordinate with the FAA Occupational Medical Surveillance and Recordkeeping (Occ Med) Program Lead to access a Physician or other Licensed Health Care Provider (PLHCP) to provide regulatory required respiratory medical evaluations to employees assigned respirators. This coordination includes interactions with the FAA Occ Med Program Assistant, who provide respiratory medical evaluation access for ATO RPP enrolled employees.

(6) Coordinate with SU RPP Leads, Safety and Health Specialists, Frontline Managers/Supervisors to ensure the employee assigned a respirator has access to the ATO RPP respiratory medical evaluation processes prior to using a respirator and periodically as determined by the PLHCP.

(7) Conduct the ATO RPP Evaluation by coordinating with SU RPP Leads, Safety and Health Specialists, and ATO stakeholders.

(8) Coordinate the tracking of required RPP records. This coordination includes interactions with the FAA Occ Med Program Record Clerk who ensure these records are stored within the Employee Medical File System (EMFS).

d. ATO SU RPP Leads. The SU RPP Lead must:

(1) Assume responsibility for disseminating and implementing the ATO RPP.

(2) Evaluate the ATO RPP effectiveness, in particular evaluate, and update as appropriate the SU RPP Workplace-Specific Procedures.

(3) Participate in ATO RPP Evaluations with the ATO RPP Lead.

(4) Coordinate with the FAA Occ Med Program Assistant to ensure SU employees assigned a respirator are provided respiratory medical evaluations as required.

(5) Coordinate with Safety and Health Specialists to ensure SU employees assigned a tight-fitting respirator are provided a fit test as required.

(6) Obtain and maintain familiarity with the ATO RPP and OSHA RPP Requirements and ensure any SU RPP Workplace-Specific Procedures are issued and maintained.

e. ATO Frontline Managers/Supervisors. Frontline Managers/Supervisors of employee's assigned respirators must:

(1) Ensure compliance with the requirements of this order for themselves and the employees they supervise.

(2) Ensure Safety and Health Specialists are consulted as appropriate for ATO RPP-related issues.

(3) Utilize Safety and Health Specialists to conduct a Workplace Hazard Assessment prior to respiratory assignment. The assessment must be documented and utilize OSHA's hierarchy of controls.

(4) Ensure the availability of assigned respirators in various sizes including the serviceable respirator components and cleaning products. Ensure Fit Test Evaluators have the necessary equipment to conduct fit tests.

(5) Enforce the proper use and care of RPP equipment. Ensure employees maintain and store respirators properly, document maintenance records, and ensure replacement pieces are available when needed.

(6) Ensure a respiratory medical evaluation is provided to employees assigned a respirator and associated recordkeeping is created and maintained. The Frontline Manager/Supervisor must ensure their employees obtain updated respiratory medical evaluations prior to the due date. If expired, ensure the employee does not conduct tasks requiring an assigned respirator until a new respiratory medical evaluation is completed and new certification date is established.

(7) Ensure employees obtain annual respiratory fit testing on their assigned respirators.

(8) Ensure all identified ATO RPP employees are enrolled, participate in, and complete all required OSH-related training including specific RPP training and are provided Hazardous Communication (HAZCOM) training on the particular respiratory contaminants and hazards. Ensure training is documented in the employee training Learning Management System (LMS), see Chapter 10 ATO RPP Training.

(9) Ensure recordkeeping is maintained.

f. ATO Safety and Health Specialist. The Safety and Health Specialist is a regulatory defined term within 29 CFR 1960.2(s). The Safety and Health Specialist may be collocated at workplace with assigned respirators or oversee respirator use at multiple workplaces. The Safety and Health Specialist must:

(1) Be technically familiar with the ATO RPP, the applicable SU RPP Workplace-Specific Procedures, OSHA Requirements, and retain the accountability and responsibility for the day-to-day operations of the specific assigned respirators in their geographical workplace.

(2) Be provided by ATO management with the equipment to recognize and evaluate OSH hazards of the workplace

(3) Conduct ATO RPP activities as noted within this order.

(4) Assist Frontline Managers/Supervisors with ATO RPP requirements.

(5) Complete training as required by this order. At a minimum, Safety and Health Specialists coordinating ATO RPP requirements must meet the minimum training noted in Chapter 10 ATO RPP Training.

(6) Assist employees on assigned respirators use, providing instruction on the correct use and maintenance.

(7) If sufficiently trained, conduct respirator training.

(8) If sufficiently trained, conduct fit tests, and serve as a Fit Test Evaluator.

g. ATO Fit Test Evaluator. Employees assigned to perform fit testing must:

(1) Be specifically and sufficiently trained to administer fit tests to an employee assigned a respirator.

(2) Follow the prescribed OSHA regulatory procedures for the specific respiratory fit test protocol.

(3) Ensure the Safety Data Sheet (SDS) for each respiratory fit test protocol is reviewed and available during the fit test process.

(4) Ensure the completion of FAA Form 3900-45 Respiratory Fit Test.

(5) Ensure fit test records are maintained.

h. ATO Employees. Employees assigned respirators must:

(1) Prior to wearing an assigned respirator, complete the required respiratory medical evaluation. Ensure a respiratory medical evaluation is performed, initially and repeated as directed by a PLHCP. Do not use a respirator if a respiratory medical evaluation has not been accomplished or the certificate has expired.

(2) Complete initial respiratory training prior to using a respirator and annually complete refresher training or when assigned. Do not use a respirator if untrained or if existing training has expired.

(3) Complete respiratory fit testing annually or when assigned. Do not use a respirator if a fit test has not been accomplished or an existing fit test has expired.

(4) Review and follow the ATO RPP and SU RPP Workplace-Specific Procedures. Review the Workplace Hazard Assessments related to assigned work tasks before performing these tasks.

(5) Review the assigned respirator’s manufacturer instructions and use the respirators in accordance with RPP training and manufacturer’s instructions. Maintain and store assigned respirators by following manufacturer’s instructions. Utilize assigned respirators for their intended use and in workplaces that are deemed required to use an assigned respirator.

(6) Report immediately to a Frontline Manager/Supervisor or a Safety and Health Specialist, malfunctioning or damaged respirators or associated components, and do not use until repair or maintenance has been accomplished.

(7) Report immediately if exposed or potentially exposed to an airborne hazard while wearing a respirator to a Frontline Manager/Supervisor or a Safety and Health Specialist.

i. PLHCP. The PLHCP is an individual legally permitted by professional license to conduct the type of medical evaluation required by the OSHA Respiratory Protection Standard. The PLHCP must:

(1) Review employee completed respiratory medical evaluation questionnaire responses and formulate a medical clearance for respirator use in the form of a written determination specific to the employee's assigned respirator.

(2) Ensure any respirator use restrictions or suggested change in respirator type assignment are included within the written determination.

(3) When responses require follow-up activities such as communicating with the employee or directing the employee to attend an in person clinic evaluation, ensure this is conveyed to the employee.

(4) Ensure the written determination includes a certification expiration date to indicate when the employee must repeat the respiratory medical evaluation process.

Chapter 2. ATO RPP

1. Introduction. This order will satisfy the OSHA requirements within 29 CFR 1910.134(c), as the written ATO RPP plan. SU entities and sub-organizations, if applicable, must ensure supplemental SU RPP Workplace-Specific Procedures are written and disseminated when a SU employee is assigned a respirator. The ATO RPP must be administered by a sufficiently trained RPP Lead. SU RPP Leads must be assigned to manage the SU RPP Workplace-Specific Procedures for their respective SU and sub-organizations.

2. ATO RPP Management.

a. Subject Matter Expertise (SME). To develop SU RPP Workplace-Specific Procedures, Frontline Managers/Supervisors must utilize SMEs, such as a Safety and Health Specialists in determining appropriate workplace hazard identification, mitigation, personal protective equipment (PPE) assignment, and management.

b. Supplemental SU RPP Workplace-Specific Procedures. A critical component of the OSHA requirement for a written RPP is the SU RPP Workplace-Specific Procedures. The RPP must be supplemented as necessary to reflect workplace respirator assignment, use, and associated hazards. SU RPP Workplace-Specific Procedures must be drafted, written, and updated regularly to reflect points of contact, authorized respirator uses, specialized respirator maintenance locations, change out schedule, SOPs, and any components which differ or are more restrictive then this order. The appropriate SU RPP Lead must coordinate the drafting and the maintaining of the SU RPP Workplace-Specific Procedures. A template is included in Appendix B Workplace-Specific Procedures Template. Existing SU RPP Workplace-Specific Procedures can be maintained as long as they contain the requirements noted within this ATO RPP.

3. Hazard Prevention and Control. Effective controls protect employees from workplace hazards and help avoid injuries, illnesses, and incidents. The ATO must identify and evaluate options for controlling hazards using OSHA's hierarchy of controls to address recognized hazards with the goal to include either elimination of the hazard, engineering controls and administrative controls to reduce the hazard, and/or use of PPE to include respirator protection as a final option. If respirators must be used, ensure the respirator selection and applicable canister, cartridge, filter, or air-purifying element assigned meets the identified and potential airborne contaminant or hazards. This involves collecting, organizing, and reviewing information with employees to determine what types of hazards may be present and which employees may be exposed or potentially exposed. The ATO must select the controls that are the most feasible and effective. In some workplaces, respirator assignment is the only feasible option based upon the contaminant and the concentration.

a. Elimination. Immediately eliminate all serious airborne hazards which may cause or likely lead to serious harm or death. If elimination of airborne hazards is feasible to implement, respirator assignment and use may not be required.

b. Interim Controls. Apply interim controls while developing and implementing long-term solutions. Interim controls may require temporary assignment and respirator use.

c. Control Selection. Select controls according to a hierarchy emphasizing engineering solutions (including elimination or substitution) first, followed by safe work practices, administrative controls, and finally PPE such as respirators. Each step must be completed prior to determining if respirator assignment and use will be required. These steps comprise a Workplace Hazard Assessment process. The hazard assessment of all potential workplace hazards which require the use of PPE shall be documented in the form of the written certification per 29 CFR 1910.132(d)(2). This process must be completed by a Safety and Health Specialists.

(1) Avoid selecting controls that may directly or indirectly introduce new hazards. Examples include exhausting airborne hazards from a workplace into other occupied workspaces.

(2) Implement a combination of control options when no single method fully protects employees.

(3) Determine the hazardous airborne contaminants, which require the respirators assignment via Workplace Hazard Assessment. This is accomplished by various means including personal sampling, environmental screening, historical data, objective data, or mathematical approaches, see OSHA Compliance Directive CPL-02-00-158.

(4) Review SDSs for exposure concerns to determine the assigned protection factor (APF) when selecting a respirator.

(5) Determine the maximum use concentration (MUC) for each airborne contaminant identified, to ensure the respirator and canister, cartridge, or filter are appropriate. There are several methods to calculate the MUC.

(a) MUC = APF x PEL (OSHA Permissible Exposure Limit)

(b) MUC = APF x STEL (OSHA Short Term Exposure Limit)

(c) MUC = APF x CL (OSHA Ceiling Limit)

(6) If no exposure limit exists, then determine the MUC based on best practices and appropriate industry standards.

(7) Review potential interaction with and interference from the use of other PPE and factor these into the respiratory selection decision.

(8) Ensure canisters, cartridges, or air-purifying filters assigned meet the identified and potential airborne hazards or contaminant.

(9) Ensure respirator change out schedules meet the workplace-specific hazards and ensure deviations from this order are noted within the SU RPP Workplace-Specific Procedures, see 3-2.h Canister or Cartridge Selection.

(10) Reference material, which may assist in meeting these requirements are found in the OSHA Respiratory Protection eTool.

4. Specialized RPP Requirements. Although Self-Contained Breathing Apparatus (SCBA), supplied airline respirators (SAR), and escape respirators are respirator types described within the RPP, their assignment and use is very restricted. If these types of respirators are to be assigned, prior to assignment and use, the SU RPP Workplace-Specific Procedures detailing

breathing air requirements, inspection, training, and all other mandatory regulatory requirements must be developed, approved, and implemented.

Chapter 3. Respirator Types and Components

1. Introduction.

a. Uses. A respirator is a form of PPE designed to protect the employee's respiratory system from inhalation hazards. OSHA, 29 CFR 1910.134(d)(1)(ii) requires respirators and their filter media, canisters, or cartridges to be approved and labeled by the National Institute for Occupational Safety and Health (NIOSH). The ATO is required to provide respiratory protection when airborne hazards are anticipated to equal or exceed the OSHA PEL. If exceedance of the PEL is not anticipated, and an employee requests to wear a respirator voluntarily, they must follow the requirements in Chapter 13 Voluntary Use of Respirators. Not all respirator types are assigned and used within the ATO. The SU RPP Workplace-Specific Procedures must indicate the specific respirator types assigned to the employees. Within this order, all references to assigned respirators or the voluntary use of respirators refer only to NIOSH-approved respirators.

b. Selection Criteria. Respirator selection is based on actual or historical data of typical workplace activities, Workplace Hazard Assessment, types and concentrations of airborne hazards, and other workplace-specific data. This information must be reviewed by RPP trained Safety and Health Specialist to determine the appropriate respirator and filter media to be utilized. OSHA provides regulatory and guidance information as noted in OSHA Publication 3352-02 2009 Assigned Protection Factors for the Revised Respiratory Protection Standard. Assigned respirators will be qualitatively and/or quantitatively assessed to ensure proper and effective fit. All respirators, respirator filter media, replacement parts, fit test, and respiratory medical evaluation must be provided at no cost to the employee assigned to wear a respirator.

2. Respirator Component Types. All assigned respirator canisters or cartridges, or filters must be NIOSH-approved and have the appropriate NIOSH-approval label.

a. Particulate Filtering Facepiece Air-Purifying Respirator (APR). These tight-fitting respirators are only effective against particulates and certain biohazard aerosols and are the most common type of respirator.

(1) OSHA defines a particulate filtering facepiece APR as a dust mask and, as 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. Within this ATO RPP, the terminology dust mask will be limited unless used in the regulatory definition to lessen the confusion with non-NIOSH-approved dust masks. These dust masks are marketed as a single strap mask with or without an exhalation valve or metal nose bridge strip. Another non-NIOSH-approved mask is a surgical mask, which is made of cloth, has loops to attach over the ears, and does not require fit testing. These types of masks are not respirators and are described in Chapter 14 Non-Respirator Face Covering Guidance.

(2) Particulate Filtering Facepiece APRs may or may not have an exhalation valve to help exhaled breath exit the facepiece. All tight-fitting respirators must be fit tested prior to initial assignment and use, unless the employee is wearing them under voluntary use

conditions. Particulate filtering facepiece APRs filter out particles and do not protect against non-particulate hazards such as gases or vapors.

(3) Particulate Filtering Facepiece APRs require respiratory medical evaluation and fit testing if assigned to an employee.

(4) Particulate Filtering Facepiece APRs are disposable and employee's replacement must follow the change out schedule.

(5) Particulate Filtering Facepiece APRs utilize the following designations to refer to the filter media's ability to work in oil airborne conditions and the filtration percentage capability of the most-penetrating particle size during laboratory testing.

(a) N refers to not resistant to oil.

(b) R refers to somewhat resistant to oil.

(c) P refers to strongly resistant to oil or oil-proof.

(d) The percentage is a laboratory test of the respirator's effectiveness to filter the most penetrating airborne aerosol size of 0.3-micrometer (µm) aerodynamic mass median diameter.

(e) 95 filters 95% of the airborne particulates.

(f) 99 filters 99% of the airborne particulates.

(g) 100 filters 99.97% and a filter or cartridge, with a 99.97% efficiency is termed a High Efficiency Particulate Air (HEPA).

b. Elastomeric Half and Full Facepiece APR. These tight-fitting respirators are equipped with filters, canisters, or cartridges and depending upon the filter media can filter particulates, gas, vapor, or combination.

(1) These respirators remove specific airborne hazards by passing ambient air through the filter media when the employee inhales.

(2) APRs require OSHA mandated respiratory medical evaluation and fit testing.

(3) APRs are not disposable and have individual components, which are cleaned and may be replaced.

(4) The APR assigned filter media must be replaced by following the change out schedule and manufacturer's instructions.

(5) Full facepiece APRs may require prescription (Rx) eyewear inserts for employees who have a respiratory medical evaluation limitation requirement.

c. Powered Air Purifying Respirators (PAPR). These tight-fitting respirators are equipped with filters, canisters, or cartridges and depending upon the filter media can filter particulates, gas, vapor, or combination. A PAPR has the same characteristics and capabilities as an APR (respiratory medical evaluation, fit test, cleanable, and replaceable components) but include a powered blower that pulls ambient air through the filter media, which is then blown into the facepiece, and has a battery pack worn by the employee.

(1) PAPRs have a higher APF when the blower is operating, as the facepiece becomes a positive pressure respirator.

(2) Non-tight-fitting PAPR, such as hooded PAPR models, do not require a fit test.

(3) PAPRs may require Rx eyewear inserts for employees who have a respiratory medical evaluation limitation requirement.

(4) Battery pack maintenance is crucial. If the battery fails during respirator use, the PAPR becomes an APR and the APF is reduced to a full face APR.

d. SCBA and SAR.

(1) Although less commonly utilized, these tight-fitting respirators do not filter the ambient air; the breathable supplied air is carried by the employee or obtained by an airline hose to allow a higher APF.

(2) Only in very unusual and limited situations, as designated by a Certified Industrial Hygienist (CIH), would these respirators be assigned and utilized. Additional SU RPP Workplace-Specific Procedures must be developed and approved if a SCBA or SAR is utilized. This would include but not limited to documenting monthly maintenance inspections of breathing air quality, compressor, lines, connections, cylinders, specialized employee training, detailed written documentation, etc.

e. Escape Respirators. These air emergency escape breathing devices allow the wearer to quickly don a loose fitting hooded respirator to evacuate an area.

(1) Although less commonly utilized, these respirators generally have 15-minutes of supplied air carried by the employee for an employee’s emergency use to escape from a room where a potential contaminant could be released.

(2) Only in very unusual and limited situations, as designated by a CIH, would these respirators be assigned and stationed for use. Additional SU RPP Workplace-Specific Procedures must be developed and approved if Escape Respirators are utilized.

f. APF. 29 CFR 1910.134(d)(3)(A), requires the Table -3-1 APF to be used to select a respirator that meets or exceeds the required level of employee protection which the respirator is being assigned.

Table 3-1. Assigned Protection Factors [1]

Type of respirator	Half mask	Full facepiece	Helmet/hood	Loose-fitting facepiece
APR [2]	10	50	----	----
PAPR	50	1,000	25/1,000	25
SAR • Demand mode • Continuous flow mode • Pressure-demand/or other positive-pressure mode	 10 50 50	 50 1,000 1,000	 ---- 25/1,000 ----	 ---- 25 ----
SCBA • Demand mode • Pressure-demand/or other positive-pressure mode (e.g., open/closed circuit)	 10 ----	 50 10,000	 50 10,000	 ---- ----

g. Canister or Cartridge Selection.

(1) Elastomeric APRs require canisters or cartridges, to be selected based on actual airborne hazards as determined by a Workplace Hazard Assessment, types and concentrations of airborne hazards, and other project or workplace-specific data. This information must be reviewed by an RPP trained Safety and Health Specialist to determine the appropriate canisters or cartridges utilized, ensuring they are compatible with the selected respirator.

(2) A canister or cartridge's service life is how long the filter media provides adequate protection from airborne hazards. The service life of a canister or cartridge depends upon many factors, including environmental conditions, i.e., temperature and humidity, breathing rate, canister or cartridge filtering capacity, and the airborne hazards concentration. When the manufacturer has a change out schedule recommendation, this will be implemented at a minimum replacement schedule for all canisters or cartridges. OSHA has several acceptable methods for determining a change out schedule as noted on the OSHA Respiratory Protection eTool. Some canisters or cartridges, which filter gasses, have an End of Service Life Indicator (ESLI). Where ESLI are not present, the employee must be informed of the change out schedule for canisters or cartridges in writing within the SU RPP Workplace-Specific Procedures.

(3) APR change out schedule must be based upon filter loading. Cartridges must be replaced whenever they are damaged, soiled, or cause noticeable increased breathing restriction.

(4) For filter media, canisters, or cartridges, the change out schedule must be included within the SU RPP Workplace-Specific Procedures. The change out schedule is based upon specific job activities and contaminants and may include replacing the filtering media prior to a full shift or the allowance to use longer than a work shift.

(5) Respirator users must not rely on breakthrough as a determination to initiate a change in a cartridge or canister. A breakthrough occurs when the canister or cartridge is

[1] Reference is from 29 CFR 1910.134(d)(3)(i)(A). Note the regulation includes quarter masks, which were removed in this order as they are not to be used.
[2] This APR category includes particulate filtering facepiece APRs.

compromised or the sorbent has become saturated. The employee must vacate the workplace of respirator use, conduct proper decontamination, dispose of the filter media, and promptly notify their Frontline Manager/Supervisor or a Safety and Health Specialist. The RPP Lead must be contacted and if warranted, the PLHCP may require the employee be evaluated.

(6) When a respirator is to be used for longer than one shift, after doffing (taking off) the respirator and cleaning, the canister or cartridge and respirator must be safely stored in separate containers to avoid contamination. The life of a canister or cartridge can be extended by storing in a container that seals the unit from ambient air, such as a sealed plastic bag or plastic container with lid. For particulate cartridges and canisters, sealing the cartridge with duct tape, will reduce contamination. Employee’s names should be noted on the containers to ensure others do not share respirators or components.

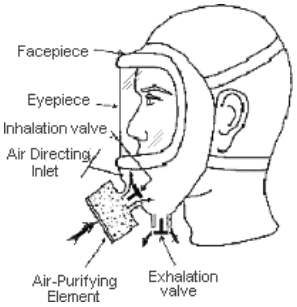
(7) The employee must replace the respiratory canisters or cartridges in clean air, not in a contaminated workplace.

Table 3-2. ATO Respirator Profiles

Respirator Type	Respirator Description and Characteristics	Respirator Example	Respirator Profiles [3]
N/R/P95 Particulate Filtering Facepiece APR	• Primarily for low-to-moderate hazard particulates and blood-borne pathogen hazards • Disposable and no serviceable parts • Tight-fitting respirator requiring fit testing, respiratory medical evaluation, and training • Common in voluntary use situations • Potential voluntary use situations		• Landscaping and outdoor nuisance dust activities • Removing paint (mechanically) and sanding painted surfaces (non-lead paint) • Road and surfaces construction including silica disturbance • Workshop, warehouse, and out building activities • Medium or high exposure risk activities with certain viral airborne biological hazards [4]
N/R/P100 Particulate Filtering Facepiece APR	• Better situated for more hazardous particulates , i.e., biohazard, and aerosol hazards • Disposable and no serviceable parts • Tight-fitting respirator requiring fit testing, respiratory medical evaluation, and training • Potential voluntary use situations		• Landscaping and outdoor nuisance dust activities • Paint spray booth activities (non-oil or volatile organic compounds (VOC) paints) • Removing paint (mechanically) and sanding painted surfaces (non-lead paint) • Road and surfaces construction including silica disturbance • Workshop, warehouse, and out building activities

[3] Respiratory profiles are actual or potential ATO employees activities associated with a specific respirator. The ATO RPP Administrator develops respiratory profiles and provides these workplace-specific respirator use requirements to the PLHCP.

[4] Based upon OSHA Hazard Recognition such as the SARS-CoV-2 COVID 19.

Respirator Type	Respirator Description and Characteristics	Respirator Example	Respirator Profiles [3]
Elastomeric Half Facepiece APR	• Capable of providing a higher level of protection than particulate filtering facepiece APRs • Filter media, canister, or cartridges are matched to the specific airborne hazard • Less comfortable than a particulate filtering facepiece APR • Respirator parts are cleanable and serviceable • Not suggested for voluntary situations [5] • Tight-fitting respirator requiring fit testing, respiratory medical evaluation, and training		• Asbestos abatement, oversight or engineering (HEPA cartridge) • Asbestos Class III Operations & Maintenance (HEPA cartridge) and asbestos bulk sampling) or Class IV (maintenance and custodial) activities without a Negative Exposure Assessment (NEA) • Asbestos, mold, and lead (in paint) activities (HEPA cartridge) • Solder activity (Vapor cartridge) • Vehicle maintenance • Welding, cutting, and brazing activities (Vapor cartridge) • Workshop, warehouse, and out building activities
Elastomeric Full Facepiece APR	• Similar respiratory protection to a half-face APR but provides face protection too • Provides splatter protection • Requires Rx eyewear inserts if noted on the PLHCP written determination • Respirator parts are cleanable and serviceable • May interfere with field of view or other assigned PPE • Not suggested for voluntary situations [5] • Tight-fitting respirator requires fit testing, respiratory medical evaluation, and training		• Asbestos Abatement, oversight or engineering (HEPA cartridge) • Asbestos Class III or Class IV activities (HEPA cartridge) without a NEA • Bird, pest, and Rodent Clean up (HEPA cartridge) • Paint spray booth activities (Oil or VOC paints) (Vapor cartridge)

[5] If approved for voluntary use, all requirements of the RPP must be implemented including respiratory medical evaluation, training, fit testing, and recordkeeping.

Respirator Type	Respirator Description and Characteristics	Respirator Example	Respirator Profiles [3]
PAPR	• More protective then an APR • Provides splatter and eye protection • Provides filtered air into the mask or hood mechanically • Heavy and maybe uncomfortable • Requires Rx eyewear inserts if noted on the PLHCP written determination • May interfere with field of view or other assigned PPE • Respirator parts are cleanable and serviceable • Not suggested for voluntary situations [5] • Battery is mounted on waist belt • Tight-fitting respirator require fit testing, respiratory medical evaluation, and training • If PAPR is a loose fitting hooded model, the fit test is not required		• Asbestos Abatement, oversight or engineering (HEPA cartridge) • Asbestos Class III or Class IV activities (HEPA cartridge) without a NEA

Respirator Type	Respirator Description and Characteristics	Respirator Example	Respirator Profiles [3]
SCBA or SAR	<u>SCBA and SAR</u> • More protective then a PAPR • Provides splatter protection • Requires Rx eyewear inserts if noted on the PLHCP written determination • May interfere with field of view or other assigned PPE • Respirator parts are cleanable and serviceable • Not for voluntary situations • Tight-fitting respirator requiring fit testing • Breathing air quality must be maintained by competent person <u>SCBA only</u> • Provides clean air into the mask or hood from a tank filled off-site • Heavy and uncomfortable • Limited use based on carried air quantity <u>SAR only</u> • Provides Grade D fresh air from a remote compressor or air bottles/cascade system of air bottles filled off-site • Hose may limit mobility and can create additional tripping hazards	  Example of an open-circuit SCBA  Example of an SAR/SCBA	• PLHCP in person evaluation is required for respiratory medical evaluation prior to initial assignment and use as noted in specific regulations. NOTE: • Extremely limited conditions where a CIH has deemed the respiratory and physical hazards require their assignment and use • Additional training is required for employee and Safety and Health Specialist • Additional equipment is required • Additional written documentation is required

Chapter 4. Occ Med Respiratory Medical Evaluation

1. Regulatory Requirement. The OSHA Respiratory Protection Standard requires an employee to be medically evaluated before being assigned a respirator.

a. The FAA Occ Med Program has access to a PLHCP and respiratory medical evaluation services under an interagency agreement (IAA) with Federal Occupational Health (FOH). In many cases, the respiratory medical evaluation can be accomplished via an online Respiratory Evaluation Portal. This online system is compliant with the questions in the 29 CFR 1910.134 App C - OSHA Respiratory Medical Evaluation Questionnaire. Some OSHA regulations require visiting a medical clinic in person based upon respirator type or contaminant/chemical-specific requirements.

b. SU or sub-organizations may elect to utilize respiratory medical evaluation services via SU contract vehicles with a PLHCP capable of providing respiratory medical evaluations or utilize a FAA Clinic for respiratory medical evaluations. If a SU or sub-organizations utilize a respiratory medical evaluation process that differs from the FAA Occ Med Program, written details and procedures must be included within the SU Workplace-Specific Procedures. This chapter will describe the process for respiratory medical evaluation via the FAA-FOH IAA.

2. ATO Respiratory Profiles. The respiratory profile is a predetermined specific respirator use summary. Employees tasked to complete the respiratory medical evaluation questionnaire online will be paired with the applicable respiratory profile that meets their workplace activities. The FAA Occ Med Program developed common ATO respiratory profiles to assist in the identification of matching respirator types, filter, canister, or cartridges, hazards, and respirator use requirements to support the respiratory medical evaluation process. When new respirator profiles are identified or existing profiles are required to be updated, SU RPP Leads and Safety and Health Specialists must coordinate with the RPP Lead on these updates. The PLHCP reviews these respiratory profiles in determining an employee’s ability to use a respirator. Respiratory profiles are based upon:

a. Type of respirator and filtering media assigned.

b. Use characteristics including frequency of use and workplace description.

c. Expected level of physical effort while wearing the respirator.

d. Additional protective clothing and equipment to be worn.

e. Temperature, humidity, and altitude extremes to be encountered.

f. Permit required confined space, oxygen deficient, or hyperbaric (diver) conditions (unlikely ATO activities).

3. Medical Evaluation Process. The ATO RPP respiratory medical evaluation process is a component of the larger FAA Occ Med Program. The respirator’s physical components and safety-related equipment may have requirements, which fall under the ATO PPE Program or other FAA or ATO EOSH-related programs. Prior to training, fit testing, assignment, and

respiratory use, all identified employees must receive a PLHCP respiratory medical evaluation to verify they are qualified to wear the respirator.

a. PLHCP Online Process. Respiratory medical evaluations are coordinated by the FAA Occ Med Program. RPP Leads, Frontline Managers/Supervisors, and Safety and Health Specialists by submitting an email to 9-FAA-OCCMED-Rec-Submit@faa.gov with the list of employees and Frontline Managers/Supervisors, their email addresses, respirator assignment, and respiratory profiles. The majority of employees completing the online respiratory medical evaluation questionnaire receive instant approval to the associated respiratory profiles. For those employees who do not receive instant approval, the PLHCP, after reviewing the questionnaire responses, may require follow-up consultations via telephone with the employee to determine if the employee is medically capable of wearing the respirator.

b. In Clinic PLHCP Evaluation Process. For those respiratory medical evaluations requiring in clinic PLHCP evaluations, the RPP Leads or Safety and Health Specialists must send an email to 9-FAA-OCCMED-Rec-Submit@faa.gov with the list of employees and Frontline Managers/Supervisors, their email addresses, respirator assignment, and regulatory citations detailing in clinic requirements.

c. Employee Instructions. The FAA Occ Med Program Assistant will provide respiratory medical evaluation instructions to the employee. The employee must complete the respiratory medical evaluation questionnaire on duty time and at no cost.

4. Medical Evaluation Results. The employee will receive the respiratory medical evaluation results electronically via their FAA email address. The employee must present a copy of the medical evaluation to the Fit Test Evaluator prior to being fit tested. The Occ Med Program will retain the results and place these in the Employee Medical Folder (EMF). The respiratory medical evaluation results will indicate one of the following:

a. Approved. Medically approved to use the specified respirator type and applicable period of certification.

b. Not Approved. Not qualified to use the specified respirator. The employee will not be able to conduct workplace activities where respirator assignment and use is required.

c. Restrictions. Restricted use of the specified respirator and the specific restrictions such as requiring use of Rx eyewear inserts, respiratory use restrictions, or limited physicality of the tasks while wearing the respirator.

(1) If the respiratory medical evaluation restricts an employee’s use by requiring Rx eyewear inserts for employees assigned a full-face APRs or PAPR, the ATO, per OSHA, must fund the purchase of these Rx eyewear inserts, see OSHA Technical Institute Student Handout Packet #4 Employers Must Provide and Pay for Most PPE.

(2) The employee must fund the cost of the eyewear Rx and provide this Rx to their Frontline Manager/Supervisor.

(3) The Frontline Manager/Supervisor must coordinate the funding and purchase of the eyewear insert and provide the eyewear insert to the employee.

d. PLHCP Suggests a Change in Respirator Assignment. If an employee fails to qualify for a negative pressure respirator due to a medical condition and the PLHCP suggests a PAPR would be allowed medically, the ATO must assign the employee a PAPR if the ATO determines the employee still must use a respirator. Alternatively, if the ATO does not follow the PLHCP suggestion, the employee must not be assigned or use a respirator. If a subsequent medical evaluation finds that the employee is medically able to use a negative pressure respirator, then the employee may be assigned the negative pressure respirator.

e. Follow-up Required. The PLHCP will provide the employee instructions on how to contact the PLHCP to clarify the employee's responses or the PLHCP may require the employee to visit an in person clinic to complete the respiratory medical evaluation. Until this process is completed, the employee's certification is not completed.

5. Certification Period. The PLHCP issues the written determination based upon the employee responses to the OSHA 29 CFR 1910.134 Appendix C Respiratory Medical Evaluation Questionnaire (Mandatory), the ATO provided respiratory profile, and any employee communications (i.e., phone or clinical appointment). Additionally the written determination must include a certification expiration date. The PLHCP utilizes the consensus standard American National Standards Institute /American Society of Safety Engineers Z88.6 - Respiratory Protection – Respirator Use – Physical Qualifications for Personnel. The consensus standard recommends that a PLHCP determine a recertification date based upon the questionnaire responses and the employee's age with recertification required every five years up to age 35, every two years from ages 35 to 45, and every year above age 45. Additionally, recertification is required when an employee's workplace requires assignment and use of a different type of respirator, there is a change in employee's health, or if the PLHCP determines the need to recertify as noted in section 4-6.b.

6. Repeating Respiratory Medical Evaluation Intervals.

a. Employee Reporting. If an employee believes they are unable to use a respirator safely due to shortness of breath, dizziness, chest pains, wheezing, or other new significant medical health change such as an asthma diagnosis or an adverse heart condition, the employee must notify their Frontline Manager/Supervisor. The Frontline Manager/Supervisor must instruct the employee not to enter workplaces where respirator assignment and use is required. The Frontline Manager/Supervisor then must coordinate with the FAA Occ Med Program to ensure the employee obtains a new medical respiratory medical evaluation and not allow the employee to resume respirator use without an updated PLHCP respiratory medical evaluation approval except as provided in section 7-2.

b. PLHCP Reporting. The PLHCP will inform an employee of the requirement to be reevaluated, such as prior to the certification expiration date.

c. Frontline Manager/Supervisor or Safety and Health Specialist Reporting. When a change occurs in workplace conditions resulting in an increased employee physiological burden, a new assigned respirator type, or new respiratory profile, there may be a requirement to repeat the respiratory medical evaluation.

Chapter 5. Employee Authorization to use Respirators

1. Employee Assignment. Frontline Managers/Supervisors must ensure respirators are assigned to their employees based upon the specific airborne hazards. Frontline Managers/Supervisors must ensure respirators are not assigned or used by an employee without valid respiratory medical evaluation, training, fit test, and associated recordkeeping.

2. Employee Removal from ATO RPP Requirements. If an employee is no longer assigned to use a respirator, several steps must be conducted to effectively closeout the employee's ATO RPP requirements.

a. The Frontline Manager/Supervisor must email the FAA Occ Med Program Assistant to update program records. There can be various reasons this can occur:

(1) The employee is reassigned to a workplace or has a change in workplace processes where respirator use is not required.

(2) The Frontline Manager/Supervisor in coordination with a Safety and Health Specialist determines respiratory protection can cease in the workplace as a Workplace Hazard Assessment has determined the airborne contaminant concentrations will be below the OSHA PEL due to implemented controls.

(3) The PLHCP indicates an employee is unable to be certified to use a respirator.

(4) The Frontline Manager/Supervisor must ensure the employee returns any assigned respirators.

b. The FAA Occ Med Program will coordinate with the PLHCP to determine if an exit respiratory medical evaluation is required per the regulations.

c. The FAA Occ Med Program Assistant and Record Clerk will update tracking and recordkeeping to note the change.

Chapter 6. Restrictions and Prohibited Respirator Assignment and Use

1. Restricted Respirator Assignment and Use.

a. ATO employees are restricted from using SCBA, SAR, and escape respirators without written CIH approval and oversight. Specialized training is required prior to assignment and use.

b. Copies of the written CIH approval must be included in the SU RPP Workplace-Specific Procedures and provided to the FAA Occ Med Program Record Clerk to include within the applicable EMF.

2. Employee Prohibited Assignment and Respirator Use.

a. ATO employees are prohibited from entering immediately dangerous to life and health (IDLH) workplaces.

b. ATO employees are prohibited from entering workplaces where airborne contaminant concentrations may result in exposures exceeding the respirator's minimum APF.

c. ATO employees are prohibited from using respirators when hazards could be present for which the respirator or its filters, canisters, or cartridges are not approved (e.g., using a HEPA filter for a carbon monoxide exposure).

d. ATO employees are prohibited from being assigned or using non-NIOSH-approved Respirators where the respirator use is required.

e. ATO employees are prohibited from using a respirator if their training, fit test certification, or respiratory medical evaluation has expired or been revoked by a PLHCP.

f. ATO employees are prohibited from voluntary respirator use without completing all requirements within Chapter 13. Voluntary Use of Respirators.

Chapter 7. Respiratory Donning and Doffing Procedures

1. General Instructions on Wearing a Respirator. If an employee cannot achieve a good respirator to face seal, different sizes and models must be tried to achieve protection. APRs often are available in different sizes allowing greater opportunity to conform to the employee's face.

a. Employees must follow manufacturer's instructions on proper donning (putting on) and doffing (taking off) of assigned respirators.

b. For all types of APRs, employees must perform proper hand hygiene prior to donning a respirator. After doffing a respirator employees must perform required cleaning and maintenance procedures and ensure proper hygiene by washing the hands and the face after storing or disposing the respirator, as applicable.

2. User Seal Check Process. Each time an employee dons the assigned respirator they must perform a user seal check.

a. The positive pressure user seal check requires the employee to block the exhalation valve and to exhale; the facepiece should puff slightly away from the face while exhaling.

b. The negative pressure user seal check requires the employee to block the air intakes (filters) and to breathe in, if there are no leaks the facepiece should collapse slightly while inhaling.

c. User seal check procedures are available from the Centers for Disease Control (CDC) Respirator Filtering out Confusion: Frequently Asked Questions about Respiratory Protection, Fit Testing Publication 2018-130 and 29 CFR 1910.134 Appendix B-1 User Seal Check Procedures (Mandatory).

3. Employee Self-Analysis of Ability to Wear a Respirator. Employees must conduct a self-analysis of their ability to don the respirator prior to each use.

a. If due to current health conditions, the employee believes the use of the respirator will adversely affect their health, they must not don the respirator, not enter the workplace where respirator assignment and use is required, and promptly notify the Frontline Manager/Supervisor.

b. Temporary health conditions can include but are not limited to health issues associated with the common cold, fever, stuffy nose, sore throat, fatigue, respiratory ailments, etc.

c. The Frontline Manager/Supervisor must ensure the employee does not wear the assigned respirator until the employee has informed them the temporary condition has subsided. Temporary health conditions do not require a repeated respiratory medical evaluation prior to returning to use a respirator.

4. Particulate Filtering Facepiece APR. The following are general guidelines on how to don and doff an APR.

a. Open the APR and place in the palm of the hand with the nosepiece resting on the fingertips. Ensure the straps are hanging down below the hand and are not tangled or twisted.

b. Place the respirator to the face, ensuring it covers the nose and mouth and rests under the chin. Hold the APR with one hand.

c. Using the free hand, place the top strap over the head above the ears. Place the lower strap over the head and position it on the neck just below the ears. Ensure the straps do not tangle or overlap.

d. To achieve a proper seal, with the fingers of both hands, mold the metal nosepiece to conform to the nose starting in the center and move down both sides of the nose simultaneously.

e. Perform a positive and negative pressure user seal check.

f. To remove the respirator, avoid touching the APR facepiece as it is considered contaminated. Only touch the straps when removing the APR. Grasp the bottom strap of the mask and lift it over the head. Then grasp the top strap and lift it over the head. Dispose or store for reuse as directed.

5. Elastomeric Half Facepiece APR. The following are general guidelines on how to don and doff an APR.

a. Loosen all straps.

b. Hold the mask so the narrow nose-cup points upward.

c. Grasp both lower mask straps, hook them behind the neck, and place the top cradle straps on the top behind the head.

d. Adjust the straps so the respirator is snug but comfortable.

e. Perform a negative and positive pressure user seal check.

f. To remove the respirator, cup the respirator and pull the top strap from the head. Then unclip the bottom strap over the head.

6. Elastomeric Full Facepiece APR or a PAPR. The following are general guidelines on how to don and doff an APR.

a. Loosen all straps.

b. Place the facepiece to the face and pull the harness over the head while placing the chin in the chin cup.

c. Pull the head harness well down on the back of the head.

d. Tighten the harness gently, starting with the bottom straps and then the middle and top straps.

e. Perform a negative and positive pressure user seal check.

f. For PAPR models, ensure the battery is securely attached to the body by strap or belt and the hose and connections from the battery to the facemask are able to move freely.

g. To remove the respirator, cup the respirator and pull the head strap over the head.

Chapter 8. Respirator Fit Testing

1. Introduction. The purpose of respiratory fit testing is to verify the selected make, model, and size of a respirator provides a good face to respirator seal. Guidance is found within the CDC Filtering out Confusion: Frequently Asked Questions about Respiratory Protection, Fit Testing Publication 2018-129. Fit testing validates the employee is knowledgeable on how to correctly inspect and maintain the respirator; the donning and doffing process; and is able to perform a user seal check on the specific respirator. Fit test records must be retained in the EMF. The Fit Test Evaluator must provide the completed FAA Form 3900-45 Respiratory Fit Test, and submit the completed record to 9-FAA-OCCMED-Rec-Submit@faa.gov upon completion.

2. Fit Test Procedures.

a. Prior to the fit test, the Frontline Manager/Supervisor must have identified the employee to be assigned a respirator, ensured the employee has an approved respiratory medical evaluation and been provided RPP training. Within the ATO, the fit test will be performed at the end of respirator initial and refresher training but may be conducted additionally when determined to be required.

b. For newly assigned respirators, the Frontline Manager/Supervisor must ensure a Fit Test Evaluator provides the employee a selection of applicable respirators to determine a good face to respirator seal. A minimum of two respirator models will be made available for employees during the fit testing to obtain an optimal fit. If the respirator can provide a valid fit, it will be assigned to the employee.

c. Employees assigned multiple respirators must be fit tested for each model separately.

d. The employee's other protective equipment should be worn during the fit test procedure to adequately demonstrate actual conditions and to determine compatibility issues. This includes assigned eyewear, head protection, earmuffs, hardhat, welding helmet, or other items associated with the head.

e. The employee must be free of facial hair and jewelry in the respiratory seal to face area. Tight-fitting APRs cannot be adequately used if the seal contacts facial hair such as beards and moustaches. Valid and invalid facial hairstyles are shown on the CDC Facial Hairstyles and Filtering Facepiece Respirators. It is the employee's responsibility to be free of facial obstructions prior to the fit testing and while using the respirator. In some cases, shaving of the face and neck should be performed directly before donning the respirator, depending upon speed of facial hair growth.

f. Employees with dentures or removable dental inserts should wear these items during fit testing if the employee intends to wear them while using the respirator in the workplace.

g. Fit tests must be repeated when the employee has experienced a change to their face to respirator seal such as significant body weight change (gaining or losing 20 pounds), facial surgery or scarring, dental changes, or if the employee indicates wearer discomfort. It is the

responsibility of the employee to notify their Frontline Manager/Supervisor or a Safety and Health Specialist if this occurs to request a new fit test.

h. The employee must inspect the respirator for deformation; missing components, or damage, which could affect its use and seal; and ensure the respirator is clean prior to use. The employee must be instructed on the maintenance of the respirator including how to dissemble and reassemble the respirator. The Fit Test Evaluator should observe this process to ensure it is performed correctly and ensure the employee is aware which pieces are replaceable and at what interval.

i. The employee must demonstrate the correct process to don the respirator without assistance. Employees may want to access a mirror or use the self-camera mode on a phone to properly don the respirator. Employees should wear the respirator for five-minutes, making adjustments as needed for comfort and usability prior to demonstrating the user seal check.

j. After properly donning a respirator, the employee must demonstrate a positive and negative pressure user seal test to ensure the wearer seal is sufficient.

k. Qualitative Fit Testing (QLFT) requires the employee to be evaluated with an OSHA approved fit test agent. Each fit test agent requires an odor, taste, or sensitivity screening to verify the employee can detect the product. If during the fit test, the product is noted or the employee reacts, then the face to seal connection is compromised. If the seal is sufficient, the employee must not detect the product while wearing the respirator. The results are either pass or fail. Failing requires adjusting the respirator straps, repeating the fit test procedures, using a different fit test protocol, or potentially using another size or type of respirator. Fit testing canisters or cartridges may differ from those used by the employee in their workplace to meet the requirements of the fit test agent.

l. Quantitative Fit Testing (QNFT) requires the employee to be evaluated with an OSHA approved fit test agent. The QNFT protocols provide an assessment of the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator achieved by modifying the facepiece to allow for sampling inside the mask midway between the nose and mouth. If the facepiece is permanently converted during fit testing, the respirator is no longer approved for workplace use.

m. Fit test processes are described in OSHA’s 29 CFR 1910.134 Appendix A Fit Testing Procedures (Mandatory) and summarized in Appendix C of this order. Acceptable fit test methods summarized by respirator types is shown in Table 8-1. Acceptable Fit Test Methods.

Table 8-1. Acceptable Fit Test Methods [6]

Respirator Type	QNFT [7]	QLFT [8]
Half-Face, Negative Pressure, APR (<100 fit factor)	Yes	Yes
Full-Face, Negative Pressure, APR (<100 fit factor) used in atmospheres up to 10 times the PEL	Yes	Yes
Full-Face, Negative Pressure, APR (>100 fit factor) [9]	Yes	No
PAPR	Yes	Yes
SAR, or SCBA used in Negative Pressure (Demand Mode) (>100 fit factor) [12]	Yes	No
SAR or SCBA used in Positive Pressure (Pressure Demand Mode)	Yes	Yes
SCBA - Structural Fire Fighting, Positive Pressure	Yes	Yes
SCBA/SAR - IDLH, Positive Pressure	Yes	Yes
Loose-fitting Respirators (e.g., hoods, helmets)	Fit testing not required	

[6] Reference: OSHA 3384-2011 Small Entity Compliance Guide, page 37. The fit factor is a quantitative measure of how well a particular respirator fits an individual and the ratio of the concentration of a contaminant in the environment to the concentration inside the mask. Note: IDLH as noted within this table, per this order ATO employees are prohibited from entering an IDLH workplace.
[7] QNFT – Quantitative Fit Testing.
[8] QLFT - Qualitative Fit Testing.
[9] These types of respirators are not likely to be used with fit factor >100.

Chapter 9. Respirator Maintenance

1. Introduction. Respirator maintenance covers inspection, cleaning, battery maintenance, repair, storage, reassignment, and disposal.

2. Respirator Inspection. Respirators must be maintained in accordance with manufacturer's instructions. The following checks are required as part of the respirator inspection procedure prior to donning the respirator. The employee must ensure:

a. All respirator components function properly including, lens (full facepiece), head straps, valves, connecting tubes, and gaskets. All elastomeric parts must be pliable, inspect components for cuts, cracking, discoloration, or other symptoms of aging. Remove inhalation and/or exhalation valve cover. Examine valve and seat for dirt, distortion, cracks, unintended bends, or tears.

b. Deficiencies found must be replaced and replacement parts must be from the same manufacturer and specific to that model. Any deficiencies, which cannot be adequately replaced, must be reported to a Frontline Manager/Supervisor or a Safety and Health Specialists.

c. The respirator straps are secure and the respirator face to seal fits comfortably.

d. Canister/cartridges and/or filters are not expired or the ESLI has not been triggered. For canisters/cartridges without an ESLI, ensure not to exceed the pre-determined change out schedule.

e. Properly don the respirator and conduct a user seal check. The employee must ensure the user seal check is successful and if not, doff the respirator and attempt the process again prior to using the respirator in the workspace.

f. After doffing the respirators, review the above steps for condition and required maintenance during cleaning and prior to storage.

3. Respirator Cleaning of Elastomeric APRs. Cleaning a respirator is critical after each use. OSHA has issued guidelines for APR cleaning and respirator manufacturers provide instructions on appropriate cleaning methods. With various methods, it is important that respirator components are cleaned, decontaminated, and disinfected in a way that does not damage it, and does not harm the user. The employee must review the OSHA 29 CFR 1910.134 Appendix B-2 Respiratory Cleaning Procedures (Mandatory) and the APR manufacturer cleaning instructions. If these instructions cannot be performed as written, the Safety and Health Specialist must establish, in writing, alternative procedures to be followed, and include these within the Appendix B SU RPP Workplace-Specific Procedures. Prior to use, ensure a Safety and Health Specialist reviews and approves the SDS for the cleaning product to be used. Employees conducting the cleaning must review the SDS and have these available.

a. Remove canisters or cartridges and either dispose or store for reuse following a change out schedule. Disassemble face pieces by removing speaking diaphragms (if applicable),

demand and pressure-demand valve assemblies, hoses, and any removable and cleanable components. Discard and replace defective parts.

b. Wash components in warm (43° C [110° F] maximum) water with a dishwashing soap/detergent or with a cleaner recommended by manufacturer's instructions. A stiff bristle (not wire) brush may be used to facilitate the removal of dirt. Alcohol wipes are not recommended to disinfect respirators.

c. Rinse components thoroughly in clean, warm (43° C [110° F] maximum), preferably running water. Drain and air-dry.

d. When the cleaner used does not contain a disinfecting agent, respirator components should be immersed for two minutes in one of the following OSHA-approved methods. Alternatively, common dish soap or individual antiseptic non-alcohol respirator wipes are recommended to avoid the requirement to mix potentially hazardous chemicals.

(1) Hypochlorite solution (50 ppm of chlorine) made by adding approximately one milliliter of laundry bleach to one liter of water or the equivalent of ¾ teaspoon bleach to one gallon of water at 43° C (110° F).

Note: Although allowed by OSHA, eventually bleach will degrade the respirator.

(2) Aqueous solution of iodine (50-ppm iodine) made by adding approximately 0.8 milliliters of tincture of iodine (6-8 grams ammonium and/or potassium iodide) and 100 cc of 45% alcohol to one liter of water at 43° C (110° F) or the equivalent of two teaspoon of iodine to 1 ½ cups and two tablespoons of alcohol added to one gallon of water.

(3) Other commercially available cleansers of equivalent disinfectant quality when used as directed.

(4) If approved by the respirator manufacturer, i.e., disinfecting with 3% hydrogen peroxide.

e. Rinse components thoroughly in clean, warm (43° C [110° F] maximum), preferably running water. Thorough rinsing of the APR is to reduce skin irritation and potential health issues. Detergents or disinfectants left to dry on face pieces may result in dermatitis. In addition, some disinfectants may cause deterioration of rubber or corrosion of metal parts if not completely removed.

(1) Components should be hand-dried with a clean lint-free cloth or air-dried.

(2) When dry, reassemble facepiece, replacing canisters or cartridges when necessary.

(3) Inspect the respirator to ensure all components function properly.

(4) Store the respirator to protect it from sun, heat, and damage.

4. Respiratory Battery Maintenance. PAPR batteries must be maintained in accordance with manufacturer's instructions. Ensure all batteries are charged in clean, well-ventilated, non-hazardous locations. Do not stack batteries while charged. All batteries should be charged at the end of each shift to allow a full charge for the next shift. Specific charging and storage requirements must be included within the Appendix B SU RPP Workplace-Specific Procedures. Specific requirements for transporting battery packs must be included to ensure the safe transportation of battery packs. If the battery is unusable and requires disposal, contact a Safety and Health Specialist on appropriate recycling procedures. Follow the manufacturer's instructions; the following are general guidelines on common battery types.

a. Nickle-Cadmium batteries must be discharged and recharged at least monthly.

b. Nickle-Metal Hydride batteries must remain connected to the powered charger when not in use. For infrequently used batteries, longer than three-months, leave the battery connected to the charger. If stored off the charger, fully charge the battery prior to storing and recharge at least once every three-months if not used sooner.

c. Lithium-ion (Li-ion) batteries should be fully charged at least every nine-months. Battery memory (also known as voltage depression) is not a significant factor for Li-ion batteries.

5. Respirator Repair. Respirator components found to be defective or in need of repair, including broken bands must be discarded. Defective APRs or those in need of repairs must be removed from service and labeled. When repairing a respirator or replacing canisters or cartridges, valves or other components, only manufacturer's approved parts must be used to keep the approval valid. No attempts should be made to modify any respirator. The Frontline Manager/Supervisor or their designee must maintain records of authorized respirator repairs.

6. Respirator Storage. All respirator equipment must be stored to protect it from damage, dust, contamination, sunlight, excessive moisture, and extreme temperatures. They must also be stored in such a way to protect the face piece and valves from damage or deformity. It is recommended respirators and canisters or cartridges be stored in separate sealable plastic storage containers, which will not deform the respirator and prevent respirator contamination if contaminants become dislodged from the canisters or cartridges. Label the respirator storage container with the user's name and date when the respirator was last inspected and cleaned/disinfected. Ensure all RPP equipment is dry prior to storing. General storage requirements include having all storage units labeled with the assigned employee's name.

a. Particulate filtering facepiece APRs should be stored in employee labeled paper bags.

b. Elastomeric APRs should be stored in rigid containers or in the case of a PAPR may be stored within the original carrying case.

7. Respirator Reassignment. If a non-disposable respirator is to be returned for reuse by other employees, the employee must clean and disinfect all respirator components prior to returning these to a Safety and Health Specialist or their Frontline Manager/Supervisor. The Safety and Health Specialist must ensure the respirator is thoroughly cleaned and complete prior to reissuing to a new employee.

8. Respirator Disposal. Particulate Filtering Facepiece APRs are disposable and do not require maintenance, cleaning, and disinfecting. For biohazards, the Particulate Filtering Facepiece APRs must be disposed of after each use. It is recommend donning a new Particulate Filtering Facepiece APR after returning from breaks away from the workplace. For other hazards (e.g., nuisance or dusts), N95s and other Particulate Filtering Facepiece APRs must be disposed of after each work shift, when the user detects airflow impairment, when they become visually covered with dust, or as specified in the change out schedule. Disposal methods for Particulate Filtering Facepiece APR vary. Biohazard used respirators for activities such as mold, bird droppings, or insect infestation may be disposed of as general waste. Respirators, which are contaminated with pathogens such as body fluids, must be disposed of as medical waste. Respirator filters and cartridges used in asbestos situations must be disposed as asbestos waste. Specific disposal requirements must be included within the Appendix B SU RPP Workplace-Specific Procedures.

Chapter 10. ATO RPP Training

1. Employee Training Requirements. Management must ensure respirator training is conducted for all employees assigned a respirator. A Safety and Health Specialist may provide supplemental training to employee's assigned respirators or to those voluntary respirator users upon request.

a. Employees assigned a respirator must complete instructor-led training course FAA68000146 Respiratory Protection – Initial which includes demonstration training, the user seal check, and a fit test. If the employee continues to be required to use a respirator, the employee must complete annually FAA68000147 Respiratory Protection – Annual Refresher, which includes the demonstration training. FAA68000147 instruction may be accomplished remotely via two-way video conferencing. Frontline Managers/Supervisors must ensure employees, Safety and Health Specialists, and RPP Leads meet the regulatory required training requirements on the proper use of respirators.

b. Training must be repeated at least annually or if changes in the workplace or respirator type render previous training obsolete. Training must be repeated if inadequacies in the employee's knowledge or use of the respirator indicate the employee has not retained the requisite knowledge to ensure safe respirator use.

c. RPP initial training topics must be suitable to the employee's respiratory protection education level and respirator type assignment and would include but are not limited to:

(1) The OSHA regulatory requirements, FAA and ATO policy and procedures requirements, and review of the SU RPP Workplace-Specific Procedures.

(2) Purpose, capabilities, and limitations of respirators.

(3) Emergency assigned respirators and/or escape-only respirators use.

(4) How to inspect, don, doff, and check the respirator seals.

(5) Use, care, maintenance, and storage of respirators.

(6) Respiratory medical evaluation requirements and medical signs and symptoms that limit or prevent respirator effectiveness.

(7) Frequency of training.

(8) Employee demonstration on how to dismantle and reassemble a respirator, conduct a user seal check, and successfully pass a fit test protocol.

(9) Employees must be provided a copy or electronic version of the ATO RPP, the associated SU RPP Workplace-Specific Procedures, and OSHA, 29 CFR 1910.134, and be aware of their assigned respiratory use duties.

d. RPP refresher training topics will be suitable to the employee's education level and respirator type assignment. The employee must demonstrate their knowledge of their assigned respirator and allow for specialized refresher on topics, which the instructor observes are deficiencies. Topics of training include but are not limited to:

(1) The OSHA regulatory requirements, FAA and ATO policy and procedures requirements, and review of the SU RPP Workplace-Specific Procedures.

(2) Purpose, capabilities, use, and limitations of respirators including emphasis on specific assigned respirator types, filters, cartridges, and canisters.

(3) Employee demonstration on how to dismantle and reassemble a respirator, conduct a user seal check, and successfully pass a fit test protocol.

(4) Employees must be provided a copy of the ATO RPP, the associated SU RPP Workplace-Specific Procedures, and a copy or access to OSHA, 29 CFR 1910.134, and be aware of their assigned respiratory use duties.

e. The training instructor must ensure completed training is updated in the employee learning history following existing FAA training recordkeeping procedures. For current approved training, see LMS and the EOSH Training Standards site.

f. In addition to RPP training, appropriate HAZCOM training or information on chemical or airborne hazards and protective measures to meet the requirements of 29 CFR 1910.1200 may be assigned.

2. Advanced Respiratory Training.

a. If SCBA, SAR or escape respirators are required, advanced training is required.

b. Ensure training is recorded within the employee's LMS.

3. Safety and Health Specialist RPP Training Requirements. RPP Leads, Safety and Health Specialists, and Fit Test Evaluators must be sufficiently trained in the regulatory requirements of respirator selection, maintenance, and use. This includes successful completion of FAA68000146 and annual completion of FAA68000147. If serving as a Fit Test Evaluator the employee must be familiar with the fit test protocols taught including equipment and fit testing kit components.

Chapter 11. ATO RPP Evaluation

1. Scope. The completed ATO RPP must be reviewed annually and updated accordingly by the RPP Lead with input from the SU RPP Lead and Safety and Health Specialists. The RPP Evaluation should include but not be limited to reviewing:

a. This order to ensure it is clear and accurate.

b. SU RPP Workplace-Specific Procedures are being developed, used, and maintained.

c. RPP training to ensure it is clear and effective.

d. RPP fit test process to ensure it is clear and effective.

e. RPP goals and objectives are being met or if not formulate strategies to address gaps.

f. ATO management and employee engagement is sufficient.

g. ATO employees assigned respirators, are cognizant of the hazards, in the workplace and are using respirators correctly.

h. Frontline Managers/Supervisors and employees are held accountable to meet the RPP while carrying out their daily responsibilities.

i. RPP resources and authority are sufficient.

j. RPP-related Workplace Hazard Assessment within workplaces are conducted and effective.

k. RPP accident and incident investigation reporting within workplaces is effective.

l. The respiratory medical evaluation process to ensure it is clear and effective.

m. RPP recordkeeping to ensure it is being completed and maintained.

2. Incorporate Process Improvements. RPP Evaluation findings must be captured and RPP documentation updated where appropriate.

Chapter 12. ATO RPP Recordkeeping.

1. ATO RPP and SU RPP Workplace-Specific Procedures. This ATO RPP and applicable SU RPP Workplace-Specific Procedures must be retained by the Frontline Manager/Supervisor and provided to an employee assigned a respirator. A copy of the SU RPP Workplace-Specific Procedures must be forwarded to the Occ Med Program for long-term recordkeeping. This may be accomplished by e-mailing the completed document to the FAA Occ Med Program at: 9-FAA-OCCMED-Rec-Submit@faa.gov. Ensure with submitted procedure documents, the geographical area and applicable employees are identified. The FAA Occ Med Record Clerk will add the record to the employee's EMF.

2. ATO RPP Training Records. Completed training records are maintained within the LMS and are accessible by the individual employee and their Frontline Manager/Supervisor.

3. Respiratory Medical Evaluation Questionnaire.

a. Completed Occ Med respiratory medical evaluation questionnaires are maintained by the PLHCP and may have Personally Identifiable Information (PII) and sensitive medical information. The PLHCP reviews and maintains this information to identify individuals and issue the written determination. The PLHCP maintains this information following medical privacy requirements.

b. The FAA maintains a copy of the written determination, which only includes the employee name, the date issued, the recertification date, the type of respirator and respirator profile, and use restrictions. The written determination must be retained to maintain OSHA compliance and does not contain PII. The employee and the FAA Occ Med Record Clerk receive the written determination from the PLHCP via email. The FAA Occ Med Record Clerk will add the record to the EMF.

4. FAA Form 3900-45 Respiratory Fit Test. The Fit Test Evaluator must complete the fit test form and provide it to the FAA Occ Med Program at 9-FAA-OCCMED-Rec-Submit@faa.gov. The FAA Occ Med Record Clerk will add the record to the employee's EMF. The Fit Test Evaluator must ensure a copy is provided to the employee and their Frontline Manager/Supervisor as a record to indicate the employee's ability to use the specific respirator.

5. Respirator Maintenance Records. Respirator maintenance records must be maintained by the Frontline Manager/Supervisor or their designee.

6. Written Approved ATO RPP Supporting Documentation. Written and approved supporting documentation including forms, SOPs, Job Aids, and the ATO RPP can be found on the ATO EOSH Toolbox.

7. Voluntary Respirator Acknowledgements Records. Completed and approved ATO Form 3900-47 Voluntary Respirator Acknowledgement must be sent by the Frontline Manager/Supervisor to the FAA Occ Med Program at: 9-FAA-OCCMED-Rec-Submit@faa.gov. The FAA Occ Med Record Clerk will add the record to the EMF.

8. Health Insurance Portability and Accountability Act (HIPAA). The FAA managed RPP records do not fall under the HIPAA regulations because the FAA is maintaining these records for OSHA compliance purposes.

Chapter 13. Voluntary Use of Respirators

1. Particulate Filtering Facepiece APRs. Voluntary use of particulate filtering facepiece APRs, as shown in Table 3-2 ATO Respirator Profiles, is allowed if the employee completes ATO Form 3900-47 Voluntary Respirator Acknowledgement, and the Frontline Manager/Supervisor signs and submits the completed form to the FAA Occ Med Program at 9-FAA-OCCMED-Rec-Submit@faa.gov. If the voluntary use is approved, the following must be accomplished:

a. Frontline Managers/Supervisors and employees must coordinate with a Safety and Health Specialists to ensure contaminant concentrations in the workplace are below the OSHA PEL for respirable hazards. This includes host employers at external workplaces where employees may visit.

b. The employee must read and sign ATO Form 3900-47. Signature demonstrates the employee has read the form's included copy of OSHA 29 CFR 1910.134, Appendix D (Mandatory) Information for Employees Using Respirators When not Required Under Standard.

c. The Frontline Manager/Supervisor must sign indicating approval.

d. Voluntary use of particulate filtering facepiece APRs requires:

(1) The employee does not require a respiratory medical evaluation, yet the employee must be made aware that their health could be jeopardized by wearing a respirator because its use could aggravate an unknown or known health issue such as a cardiac and/or pulmonary disorder.

(2) The employee does not require a fit test.

(3) The employee must follow the specific respirator's manufacture instructions including conducting user seal checks, heed warnings, limitations, maintenance, cleaning, and care

(4) The particulate filtering facepiece APR must be NIOSH-approved.

(5) Employees must not share their respirator with other employees.

(6) Employees must not use voluntary respirators for activities requiring respirator use. In these situations, only those respirators assigned must be used.

(7) Voluntary respirators may be purchased by the employee or the ATO. This statement does not imply the ATO must fund voluntary respirators for all situations.

(8) The Frontline Managers/Supervisors must provide approval for an employee to voluntarily use a particulate filtering facepiece APR and ensure the respirator use itself does not pose a hazard in the workplace. Any restrictions on the use or valid periods of use must be stipulated.

2. Elastomeric Half or Full Facepiece APRs or PAPRs. These respirators are not recommended to be used in voluntary situations unless approved by the Frontline Manager/Supervisor or Safety and Health Specialist with coordination with the SU RPP Lead.

a. The Frontline Managers/Supervisors must coordinate with the SU RPP Lead to sign and approve having an employee voluntarily use an elastomeric APR or PAPR by completing the applicable section of ATO Form 3900-47. This approval signifies the voluntary respirator use itself does not pose a hazard in the workplace and acknowledges that all OSHA RPP Requirements will be required to be implemented.

b. The ATO must provide the voluntary respirator user all OSHA RPP requirements, including respiratory medical evaluation, employee training, respirator fit test, respirator maintenance, and recordkeeping. If the employee is within the RPP with an assigned respirator, and the voluntary use is with the same type of respirator, the training, fit test, and respiratory medical evaluation may serve both voluntary and assigned respirator use.

c. Ensure SU RPP Workplace-Specific Procedures are captured to include the specific voluntary use parameters.

Chapter 14. Non-Respirator Face Covering Guidance.

1. Face Covering Guidance. Although face coverings are not respirators and are not covered under 29 CFR 1910.134, the following guidance is provided when face coverings are required or recommended for ATO employees in the workplace. Face coverings are not PPE or appropriate substitutes for required PPE. Face coverings should not be used by an employee who has trouble breathing or otherwise is unable to put on or remove a mask without assistance. Face coverings include non-NIOSH-approved masks. This general guidance may be supplemented with FAA or ATO issued guidance specific to the airborne hazards.

2. Cloth Face Coverings.

a. Cloth face coverings may be commercially produced or improvised homemade garments, scarves, bandanas, or items made from t-shirts or other fabrics. They may be disposable or reusable after proper washing. Plastic, synthetic, and waterproof materials are not recommended for face coverings, as they would hinder the ability to breathe.

b. Cloth face coverings are worn over the nose and mouth to contain the wearer's potentially infectious respiratory droplets produced when an infected person coughs, sneezes, or talks and to limit the spread to others. For example, face coverings are recommended or in some cases required to reduce the spread of the Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2), the virus that causes Coronavirus Disease 2019 (COVID-19).

c. Cloth face coverings seals should not be loose and must never be made of material that restricts air intake. Multiple layers of breathable fabric are recommended.

3. Surgical Masks.

a. Surgical masks are a facemask regulated by the United States Food and Drug Administration (FDA) when used as a medical device. Although not all devices that look like surgical masks are actually medical-grade, cleared devices and when used as a face covering in the ATO workplace, the FDA regulation is not applicable.

b. Surgical masks are used to protect employees against splashes and sprays (i.e., droplets) containing potentially infectious materials. In this capacity, surgical masks are considered PPE under OSHA's PPE standard.

c. Surgical masks are worn to contain the wearer's respiratory droplets yet will not if to loose.

d. Surgical masks must be properly disposed of after use and are not washable.

4. Voluntarily Face Coverings.

a. Employees may choose to use cloth face coverings, as a means of source control, because of transmission risk cannot be controlled through engineering or administrative controls, including social distancing.

b. Employees may wear face coverings if they desire.

(1) Employees are not required to complete all requirements which are required of employees assigned respirators.

(2) Employees should use their best judgement on wearing face coverings in the workplace to ensure it does not create a hazard. This can include but is not limited to ensuring face covering straps do not create a hazard to the user or other employees due to straps being entangled in machinery, affect the use of required PPE, or effect workplace required communication.

5. Face Covering Instructions.

a. Details on how to select, wear, wash, and make face coverings and considerations for wearing masks can be found on the CDC Use of Masks to Help Slow the Spread of COVID-19.

b. Conduct proper hand hygiene prior to donning a face covering.

c. Place the face covering over the nose and mouth and secure it under the chin.

d. Ensure the face covering fits snugly against the sides of the face by using the attached strings, ear loops, or straps.

e. Ensure breathing is easy and not restricted.

f. The CDC does not recommend face coverings for source control if they have an exhalation valve or vent which is not filtered. In these situations if an employee is voluntarily wearing a respirator with an exhalation valve, the valve should be covered with another face covering material.

g. To remove the face covering, handle only the strings, ear loops, or straps and remove from the head. Fold the outside corners together. Do not touch the eyes, noise, and mouth while removing and after handling the face covering conduct proper face and hand hygiene.

h. Disposable face coverings may be placed in regular trash, cloth face coverings may be washed as noted in Section 14-7, and reusable face coverings stored as noted in Section 14-8.

6. Cloth Face Covering Maintenance.

a. The CDC provides guidance on washing cloth face coverings. OSHA suggests following those recommendations, and always washing or discarding cloth face coverings that are visibly soiled by using regular laundry detergent at the warmest appropriate water setting for the cloth. A mesh laundry bag will keep the masks from tangling with other clothes. The mesh bag can go directly from the washer to the dryer. Cloth masks should be dried on the highest heat dryer cycle applicable to the fabric type.

b. Cloth face coverings may be reused until torn, the elastic straps fail to provide a secure fit, or the mask no longer fits.

c. Cloth face coverings, which are to be reused, should be stored in a breathable paper bag. Label face coverings to ensure no one else uses the face covering.

7. Non-NIOSH-Approved Dust Mask or Surgical Mask Maintenance.

a. These masks are designed to be disposable. Masks cannot be effectively cleaned. Exposure to excessive amounts of water and cleaning products will destroy the fibers and can damage mask.

b. Disposable masks are designed for up to eight-hour of use. However, if the mask still fits and is clean, it may be reused.

c. Disposable masks, which are to be reused, should be stored in a breathable paper bag. Label masks and containers to ensure no one else uses the mask.

8. Face Covering Purchase.

a. OSHA requires employers to provide their employees PPE for protection against exposure to occupational hazards. Since face coverings are not PPE, OSHA's PPE standards do not require employers to provide them.

b. However, the ATO may choose to provide face coverings and may require their use as a feasible means of control to address viral airborne respiratory hazards.

9. Transparent Face Shield.

a. A face shield may be used to protect the wearer’s eyes and may block the spray of respiratory droplets.

b. A face shield is not a substitute for face coverings if these are required in the workplace.

c. Face shields are transparent plastic and can be cleaned by soap and water and dried to prevent water droplet staining.

Chapter 15. Administrative Information.

1. Distribution. This order will be distributed electronically.

2. Authority to Change This Order. The ATO's EOSH Services Group is the OPR with the authority to modify this order.

3. References.

a. 29 CFR 1910 Subpart I Personal Protective Equipment https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartI

b. 29 CFR 1910 Subpart I Appendix B Nonmandatory Compliance Guidelines for Hazard Assessment and Personal Protective Equipment Selection https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910SubpartIAppB

c. 29 CFR 1910.1200 Hazard Communication https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1200

d. 29 CFR 1910.134 Respiratory Protection https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134

e. 29 CFR 1910.134 App A - Fit Testing Procedures (Mandatory) https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppA

f. 29 CFR 1910.134 Appendix B-1 User Seal Check Procedures (Mandatory) https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppB1

g. 29 CFR 1910.134 Appendix B-2 Respiratory Cleaning Procedures (Mandatory) https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppB2

h. 29 CFR 1910.134 Appendix C - OSHA Respiratory Medical Evaluation Questionnaire https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppC

i. 29 CFR 1910.134, Appendix D (Mandatory) Information for Employees Using Respirators When not Required Under Standard https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.134AppD

j. American Industrial Hygiene Association publication, The Occupational Environment: Its Evaluation, Control, and Management

k. American National Standards Institute /American Society of Safety Engineers Z88.6 - Respiratory Protection – Respirator Use – Physical Qualifications for Personnel

l. ATO EOSH Toolbox https://my.faa.gov/org/linebusiness/ato/operations/atc_facilities/eosh_services.html

m. ATO EOSH Toolbox Occ Med Program https://my.faa.gov/org/linebusiness/ato/operations/atc_facilities/eosh_services/occ_med_survei_record.html

n. ATO EOSH Toolbox RPP https://my.faa.gov/org/linebusiness/ato/operations/atc_facilities/eosh_services/resp_protect.html

o. ATO EOSH Training Standards https://eoshtnat.faa.gov/Library/index.cfm?Action=

p. ATO Form 3900-47 Voluntary Respirator Acknowledgement https://employees.faa.gov/documentLibrary/media/Form/Final_for_Posting_Voluntary_Respiratory_Acknowledgement_Form_3900-47.pdf

q. CDC Facial Hairstyles and Filtering Facepiece Respirators https://www.cdc.gov/niosh/npptl/pdfs/FacialHairWmask11282017-508.pdf

r. CDC Respirator Filtering out Confusion: Frequently Asked Questions about Respiratory Protection, Fit Testing Publication 2018-129 https://www.cdc.gov/niosh/docs/2018-129/default.html

s. CDC Respirator Filtering out Confusion: Frequently Asked Questions about Respiratory Protection, User Seal Check Publication 2018-130 https://www.cdc.gov/niosh/docs/2018-130/default.html

t. CDC Use of Masks to Help Slow the Spread of COVID-19 https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/diy-cloth-face-coverings.html

u. FAA Form 3900-45 Respiratory Fit Test https://employees.faa.gov/documentLibrary/media/Form/Final_FAA_Respiratory_Fit_Test_Form_3900-45_508_Compliant.pdf

v. FAA Occ Med Program Assistants and Record Clerks email 9-FAA-OCCMED-Rec-Submit@faa.gov

w. NIOSH 42 CFR PART 84 Approval of Respiratory Protective Devices https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title42/42cfr84_main_02.tpl

x. OSHA Inspection Procedures for the Respiratory Protection Standard Compliance Directive CPL-02-00-158 https://www.osha.gov/OshDoc/Directive_pdf/CPL_02-00-158.pdf (Workplace Hazard Assessment)

y. OSHA Publication 3352-02 2009 Assigned Protection Factors for the Revised Respiratory Protection Standard https://www.osha.gov/Publications/3352-APF-respirators.pdf

z. OSHA Publication 3384-2011 Small Entity Compliance Guide for the Respiratory Protection Standard https://www.osha.gov/Publications/3384small-entity-for-respiratory-protection-standard-rev.pdf

aa. OSHA Respiratory Protection eTool https://www.osha.gov/SLTC/etools/respiratory/

bb. OSHA Technical Institute Student Handout Packet #4 Employers Must Provide and Pay for Most PPE https://www.osha.gov/dte/outreach/intro_osha/intro_to_osha_handout.pdf (Rx eyewear inserts)

Appendix A. RPP Forms

a. FAA Form 3900-45 Respiratory Fit Test.

b. ATO Form 3900-47 Voluntary Respirator Acknowledgement.

Appendix B. SU RPP Workplace-Specific Procedures Template

When respirators are assigned or when NIOSH-approved elastomeric half or full facepiece APR or PAPR are allowed to be voluntarily used in the workplace, the SU RPP Lead is required to develop and maintain SU RPP Workplace-Specific Procedures. This document may be issued at the SU level, facility, or other geographical workplace level. This template may be used or if existing procedures are written, these can be maintained as long as the minimum information is included and recordkeeping requirements are met.

The Frontline Manager/Supervisor must coordinate with a Safety and Health Specialist to ensure assigned respirator types and use requirements are captured in the procedures. Retain the procedures with this order at the workplace where respirator assignment and use is required, provided to employees assigned respirators, and a copy sent for recordkeeping to the FAA Occ Med Program, see Chapter 12 ATO RPP Recordkeeping.

a. SU RPP Workplace-Specific Procedures Point of Contact (POC):

SU RPP Lead	Full FAA Name
	FAA email address
Safety and Health Specialist, if overseeing respirator use	Full FAA Name
	FAA email address
Other ATO RPP POC if applicable	Full FAA Name
	FAA email address
Geographical area, facility type, or other description	Provide the geographical parameters of these work-place specific procedures (i.e., SU, Service Area, District, Facility Type, etc.).

b. Authorized employees.

(1) The names of employee's assigned respirators must not be included in the SU RPP Workplace-Specific Procedures. The SU RPP Lead or applicable Safety and Health Specialist though must have access to specific employee respiratory assignment, profile, medical evaluation certification expiration date, training completion date, and fit test completion date to aid in RPP compliance. Employee data status can be obtained by coordinating with the FAA Occ Med Program Assistant. Ensuring the connection between assigned employees and the procedures is important to assist the FAA Occ Med Record Clerk to ensure the procedures are included into the applicable EMFs.

(2) The SU RPP Lead or applicable Safety and Health Specialist must have access to specific workplace exposure data, i.e., Workplace Hazard Assessments, airborne hazards data, etc., which was used to determine respirator requirements.

c. SU RPP Workplace-Specific Procedures. Insert or attach applicable SU RPP Workplace-Specific Procedures. This should include any requirements beyond the ATO RPP order to include but not be limited to, respirator types; airborne hazards; workplace activities; change out schedule; maintenance supply locations; and procedures. Utilize the following table by incorporating applicable respiratory profiles from Table 3-2 ATO Respirator Profiles. Modify as appropriate. Table B-1 provides a template for these procedures.

Table B-1. Workplace-Specific Respirator Types, Uses, and Requirements

Location	Respirator Type	Respiratory Profile and Hazard	Filter Canister or Cartridge	Change out Schedule	Workplace-Specific Requirements
Geographical Area	Elastomeric Full-facepiece APR	Particulates including asbestos fibers	HEPA		
		Mold			
		Entering asbestos or lead abatement containments			
		Bird fecal exposures			
		Lead sampling			
		Possible pandemic cleaning situation			
	Elastomeric Half-facepiece APR with N-100 filters (i.e., 99.97% efficient	[10] Particulates such as asbestos, lead, arsenic, cadmium, welding fumes, wood dust, and crystalline silica	HEPA		
			Chemical Specific Canister/cartridge		
	Elastomeric Half-facepiece APR with N-95 filters (i.e. 95% efficient)	[10] Particulates such as welding fumes, wood dust, and crystalline silica	HEPA		
			Chemical Specific Canister/cartridge		
	Elastomeric Half-facepiece APR with organic vapor canisters or cartridges	[10] Organic vapors such as solvents, paint thinner, xylene, glutaraldehyde	Organic vapor		
			Chemical Specific Canister/cartridge		

[10] Low concentrations is defined as airborne contaminant concentrations below the OSHA Action Level or half of the PEL.

Appendix C. Summary of OSHA's 29 CFR 1910.134 Fit Test Processes

d. Fit Testing Protocols. The Fit Test Evaluator must follow the Fit Test Procedures found within OSHA 29 CFR 1910.134 Appendix A Fit Testing Procedures (Mandatory). The following provides a summary of the OSHA approved protocols and tables, which describe the protocols allowed for specific types of respirators.

e. QLFT Agents. Each QLFT protocol relies on using a non-hazardous test aerosol. Each protocol follows Table C-2 General Protocol Exercises.

(1) Isoamyl Acetate Protocol. A sweet banana like vapor odor-based protocol, which must include a threshold screening demonstration without wearing the respirator to determine if the employee detects the banana odor at low concentrations.

(2) Saccharin Solution Aerosol Protocol. A sweet-tasting aerosol protocol, which must include a threshold screening demonstration without wearing the respirator to determine if the employee detects the taste at low concentrations.

(3) Bitrex ™ Solution Aerosol Protocol. A bitter-tasting aerosol protocol, which must include a threshold screening demonstration without wearing the respirator to determine if the employee detects the taste at low concentrations.

(4) Irritant Smoke Protocol. An odor threshold screening protocol, which must include a threshold screening demonstration without wearing the respirator to determine if the employee reacts at low concentrations by coughing. The smoke will irritate eyes, lungs, and nasal passages and must be conducted with closed eyes.

Table C-1. QLFT Fit Testing Requirements Summary

OSHA Protocols	Respirator Type and Filter Type	Not Acceptable for these Respirators	Chamber Used
(1) Isoamyl Acetate Protocol	Filtration: Requires organic vapor canisters or cartridges. Respirator: Requires elastomeric half-face or full facepiece [11] APR.	Particulate filtering facepiece N/R/P 95/99/100 APR.	Plastic sheeting (55-gallon drum liner) chamber.
(2) Saccharin Solution Aerosol Protocol (3) Bitrex ™ Solution Aerosol Protocol	Filtration: Requires particulate filter. Respirator: Particulate filtering facepiece N/R/P 95/99/100 APR **or** elastomeric half-face or full facepiece [11] APR with particulate filter canister or cartridge filter.		Hood assembly (3M assembly or equivalent).
(4) Irritant Smoke Protocol	Filtration: Requires HEPA filters Respirator: Particulate filtering facepiece P100 APR **or** elastomeric half-face or full facepiece [11] APR with HEPA canister or cartridge filter.	Particulate filtering facepiece N/R/P 95/99 APR.	No fit test chamber.

[11] Full face, Negative Pressure, APR (<100 fit factor) used in atmospheres up to 10 times the PEL.

f. Standardized Fit Testing Exercises. All QLFT and QNFT protocols follow the exercise regimen in Table C-2 General Protocol Exercises, except for the two modified Ambient Aerosol Condensation Nuclei Counter (CNC) QNFT protocols (d.(2) and d.(3)), the Controlled Negative Pressure (CNP) QNFT protocol (d.(5)), and the CNP REDON QNFT protocol (d.(6)).

Table C-2. General Protocol Exercises

Exercises [12]	Exercise procedure
Normal Breathing	In a normal standing position, without talking, the test subject must breathe normally. Performed for one minute.
Deep Breathing	In a normal standing position, the test subject must breathe slowly and deeply, taking caution not to hyperventilate. Performed for one minute.
Turning head side to side	Standing in place, the subject shall slowly turn his/her head from side to side between the extreme positions on each side. The head shall be held at each extreme momentarily so the subject can inhale at each side. Performed for one minute.
Moving head up and down	Standing in place, the subject shall slowly move his/her head up and down. The subject shall be instructed to inhale in the up position (i.e., when looking toward the ceiling). Performed for one minute.
Talking	The subject shall talk out loud slowly and loud enough so as to be heard clearly by the test conductor. The subject can read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song. Performed for one minute.
Grimace	The test subject shall grimace by smiling or frowning. (This applies only to QLFT; it is not performed for QLFT). Performed for 15 seconds.
Bending over	The test subject shall bend at the waist as if he/she were to touch his/her toes. Jogging in place shall be substituted for this exercise in those test environments such as shroud type QNFT or QLFT units that do not permit bending over at the waist. Performed for one minute.

g. QNFT Agents. Each QNFT protocol relies on using a non-hazardous test aerosol, such as corn oil, polyethylene glycol 400, di-2-ethyl hexyl sebacate, or sodium chloride, generated in a test chamber, and employing a CNC instrument to quantify the fit of the respirator. QNFT uses CNP and appropriate instrumentation to measure the volumetric leak rate of a facepiece to quantify the respirator fit.

(1) Generated Aerosol QNFT Protocol. An aerosol generating, dilution, and measurement protocol using particles and a respirator probe to conduct the fit test. Follow Table C-2 General Protocol Exercises.

(2) Ambient Aerosol CNC QNFT Protocol. A nuclei generating and measurement protocol, which uses a PortaCount ™ with a respirator tube inlet to conduct the fit test. Follow Table C-2 General Protocol Exercises.

[12] Exercises are listed in the order in which they are to be administered.

(3) Modified Ambient Aerosol CNC QNFT Protocol - A nuclei generating and measurement protocol, which uses a PortaCount ™ with a respiratory tube inlet to conduct the fit test and is specific for elastomeric half-face and full facepiece APRs. When administering comply with the requirements of the ambient aerosol, CNC QNFT protocol (d.(2)). Follow Table C-3 Modified Ambient Aerosol CNC Protocol Exercises (Elastomeric).

Table C-3. Modified Ambient Aerosol CNC Protocol Exercises (Elastomeric) [13]

Exercises [19]	Exercise procedure	Measurement Procedure
Bending Over	The test subject must bend at the waist, as if going to touch his/her toes for 50 seconds and inhale two times at the bottom. [14]	A 20-second ambient sample, followed by a 30-second mask sample.
Jogging-in-Place	The test subject must jog in place comfortably for 30-seconds.	A 30-second mask sample.
Head Side-to-Side	Head Side-to-Side The test subject must stand in place; slowly turning his/her head from side to side for 30-seconds and inhale two times at each extreme. [14]	A 30-second mask sample.
Head Up-and-Down	The test subject must stand in place; slowly turning his/her head from side to side for 30-seconds and inhale two times at each extreme. [14]	A 30-second mask sample followed by a 9-second ambient sample.

(4) Modified Ambient Aerosol CNC QNFT Protocol. A nuclei generating and measurement protocol using a PortaCount ™ with a respiratory tube inlet to conduct the fit test and is specific for particulate filtering facepiece APR. When administering comply with the requirements of the ambient aerosol, CNC QNFT protocol (d.(2)). Follow Table C-4 Modified Ambient Aerosol CNC Protocol Exercises (Particulate).

Table C-4. Modified Ambient Aerosol CNC Protocol Exercises (Particulate) [15]

Exercises [19]	Exercise procedure [22]	Measurement Procedure
Bending Over	The test subject must bend at the waist, as if going to touch his/her toes for 50 seconds and inhale 2 times at the bottom.	A 20-second ambient sample, followed by a 30-second mask sample.
Talking	The test subject must talk aloud slowly and loud enough to be heard clearly by the Fit Test Evaluator for 30-seconds. He/she will either read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.	A 30-second mask sample.
Head Side-to-Side	The test subject must stand in place; slowly turning his/her head from side to side for 30-seconds and inhale 2 times at each extreme.	A 30-second mask sample.
Head Up-and-Down	The test subject must stand in place, slowly moving his/her head up and down for 39 seconds and inhale 2 times at each extreme.	A 30-second mask sample followed by a 9-second ambient sample.

[13] Only applicable for elastomeric half-face and full facepiece APRs.
[14] It is optional for test subjects to take additional breaths at other times during this exercise.
[15] Only applicable for particulate filtering APR.

(5) CNP QNFT Protocol. An alternative technology to aerosol fit test procedures, which generates and measures negative pressure inside the respirator and associated leakage. CNP protocol exhausts air temporarily from a sealed respirator facepiece to generate a constant negative pressure inside the facepiece. This method measures leak rates to determine facepiece fit. The respirator user must hold their breath during the testing process in ten second intervals. Follow Table C-5 CNP Protocol Exercises.

Table C-5. CNP Protocol Exercises

Exercises [19]	Exercise procedure	Measurement Procedure
Normal Breathing	In a normal standing position, without talking, the test subject must breathe normally for one minute.	Hold head straight ahead and hold breath for 10 seconds during the test measurement.
Deep Breathing	In a normal standing position, the test subject must breathe slowly and deeply for one minute, being careful not to hyperventilate.	Hold head straight ahead and hold breath for 10 seconds during the test measurement.
Turning head side to side	Standing in place, the test subject must slowly turn his/her head from side to side between the extreme positions on each side for one minute. The head must be held at each extreme momentarily, so the test subject may inhale at each side.	Hold head full left and hold breath for 10 seconds during the test measurement. Hold head full right and hold breath for 10 seconds during the test measurement.
Moving head up and down	Standing in place, the test subject must slowly move his/her head up and down for one minute. The test subject must be instructed to inhale in the up position (i.e., when looking toward the ceiling).	Hold head full up and hold breath for 10 seconds during the test measurement. Hold head full down and hold breath for 10 seconds during the test measurement.
Talking	The test subject must talk aloud slowly and loud enough to be heard clearly by the Fit Test Evaluator for 30-seconds. He/she will either read from a prepared text such as the Rainbow Passage, count backward from 100, or recite a memorized poem or song.	Hold head straight ahead and hold breath for 10 seconds during the test measurement.
Grimace	The test subject must grimace by smiling or frowning for 15 seconds.	Hold head straight ahead and hold breath for 10 seconds during the test measurement.
Bending Over	The test subject must bend at the waist as if he or she were to touch his/her toes for one minute. Jogging in place must be substituted for this exercise in those test environments such as shroud-type QNFT units prohibiting bending at the waist.	Hold head straight ahead and hold breath for 10 seconds during the test measurement.
Normal Breathing	The test subject must remove and re-don the respirator within a one-minute period. Then, in a normal standing position, without talking, the test subject must breathe normally for one minute.	Hold his/her head straight ahead and hold breath for 10 seconds during test measurement.

(6) CNP REDON Quantitative Protocol. An alternate CNP QNFT protocol which follows the CNP quantitative fit testing protocol requirements (d.(5)), and includes removing and replacing the respirator during the fit test. Follow Table C-6 CNP REDON Protocol Exercises.

Table C-6. CNP REDON Protocol Exercises

Exercises 19	Exercise procedure	Measurement Procedure
Facing Forward	Stand and breathe normally, without talking, for 30-seconds.	Face forward, while holding breath for 10 seconds.
Bending Over	Bend at the waist, as if going to touch his/her toes, for 30-seconds.	Face parallel to the floor, while holding breath for 10 seconds.
Head Shaking	For about three seconds, shake head back and forth vigorously several times while shouting.	Face forward, while holding breath for 10 seconds.
REDON 1	Remove the respirator; loosen all facepiece straps, and then properly don the respirator mask.	Face forward, while holding breath for 10 seconds.
REDON 2	Remove the respirator; loosen all facepiece straps, and then properly don the respirator mask again.	Face forward, while holding breath for 10 seconds.

h. . QNFT Fit Testing Requirements. Table C-7 QNFT Fit Testing Requirements Summary provides description of acceptable and not acceptable respirators per protocol.

Table C-7. QNFT Fit Testing Requirements Summary

OSHA Protocols	Respirator Type and Filter Type	Not Acceptable for these Respirators	Chamber Used
(1) Generated Aerosol Quantitative Protocol	Filtration: Requires HEPA filters. Respirators: Particulate filtering facepiece APR P100 **or** APR equipped with HEPA filters.	Particulate filtering facepiece N/R/P 95/99 APR.	Fit test chamber.
(2) Ambient Aerosol CNC Quantitative Protocol	Filtration: Requires particulate filter. Respirators: This option is acceptable for particulate filtering facepiece APR N/R/P 95/99/100 **or** Elastomeric half-face and full facepiece APR equipped with particulate filters.		No fit test chamber.
(3) Modified Ambient Aerosol CNC Quantitative Protocol for full-facepiece and half-mask elastomeric APRs	Filtration: Requires particulate filter. Respirators: This option is acceptable for elastomeric half-face and full facepiece APR only.	Particulate filtering facepiece N/R/P 95/99/100 APR.	

OSHA Protocols	Respirator Type and Filter Type	Not Acceptable for these Respirators	Chamber Used
(4) Modified Ambient Aerosol CNC Quantitative Protocol for particulate filtering facepiece APRs - CNP Quantitative Protocol	Filtration: Requires particulate filter. Respirators: Particulate filtering facepiece N/R/P 95/99/100 APR only.	Elastomeric half-face and full facepiece APR.	
(5) CNP Quantitative Protocol	Filtration: Requires particulate filter. Respirators: This option is acceptable for elastomeric half-face and full facepiece APR only.	Particulate filtering facepiece N/R/P 95/99/100 APR.	No fit test chamber.
(6) CNP REDON Quantitative Protocol.	Filtration: Requires filter be replaced with CNP test manifold. Respirators: This option is acceptable for all particulate filtering facepiece APRs or elastomeric half-face and full facepiece APR equipped with particulate filters.		No fit test chamber.

i. Fit Test Evaluators Qualification. The Fit Test Evaluator must be competent in the fit test protocols they administer and able to interpret the results. Frontline Managers/Supervisors must coordinate with Safety and Health Specialists, contract services, or other trained individuals to perform the role of the Fit Test Evaluator. Sufficient qualifications of the Fit Test Evaluator include adequate knowledge of:

(1) Respirator selection criteria.

(2) Respirator parts, components, and functions.

(3) Demonstrating inspection, cleaning, and maintenance of respirators.

(4) Identification of respirator types, makes, models and alternatives.

(5) Fit testing procedures, limitations, and precautions.

(6) Correct donning and doffing respirator procedures.

(7) User seal check procedures.

(8) Qualitative testing process and/or quantitative testing process (depending upon the protocol to match the applicable types of respirators being evaluated).

(9) Setting up fit test equipment.

(10) Ability to administer the fit test and explain to an employee the components.

(11) Evaluate the employee’s fit test, observe all components and interpret results.

(12) Identify fit test failure and provide remedies to a successful retest including improvements in donning or adjusting the respirator or resizing the respirator.

(13) Record observations, inform the employee of the results, complete FAA Form 3900-45 Respiratory Fit Test, and submit recordkeeping to the Occ Med Program.

(14) Disinfect the respirator fit test system prior to use by another employee.

j. Fit Test Instructions.

(1) Each employee must be shown the proper method of donning, positioning, and strapping/tensioning the respirator to achieve an optimal fit.

(2) Ensure user seal check process is explained to the employee.

(3) Explain the fit test procedures, specific test exercise to be conducted, and include any precautions as noted on the SDS.

(4) Employees must review the manufacturer's instructions associated with the respirator.

k. General Fit Test Procedures.

(1) The fit test is to be conducted in an atmosphere containing the fit-test agent. Specially adapted enclosures or chambers are used for QLFT fit-test agents to create a localized test atmosphere. Some wearers may not be sensitive enough to the fit-test agent resulting in face-seal leaks that may not be detected. It is necessary to establish whether the wearer is able to detect the fit-test agent at low concentrations by conducting a threshold screening.

(2) Failure to react to the threshold screening will require the Fit Test Evaluator to try another fit test agent. If the employee detects the taste or smell of the fit-test agent during the actual fit test then the fit is unsatisfactory. Re-inspect and/or readjusted the respirator and repeat the test.

l. General Fit Test Precautions.

(1) The Fit Test Evaluator must read the SDS and fit test protocol's instructions regarding specific handling precautions.

(2) Ensure the employee to be fit tested does not eat, chew gum, drink (other than plain water), or smoke at least 30 minutes prior to the test to avoid reactions with the threshold screening. While using a fit test enclosure carbon dioxide levels will increase and oxygen decrease, ensure the employee is aware if they become hot, fatigued, or under distress to immediately stop the fit test, remove the respirator, and proceed to fresh air.

(3) Employees will not be fit tested or issued respirators with a tight-fitting facepiece if the employee has conditions that could compromise the facepiece to face seal. Examples include facial hair, facial deformities, and jewelry or other objects protruding under the facepiece seal.

(4) Prior to the fit test, the Fit Test Evaluator must ask the employee if there are any health conditions, which prevent them from partaking in the fit test exercises. Caution employees that this includes deep breathing, turning their head side to side and up and down, bending over, and jogging in place. If the employee believes a personal health concern prevents them from wearing the respirator for the fit test, they should not proceed with the evaluation and discontinue the use of respirators until medically qualified or current health conditions improve. The employee must inform their Frontline Manager/Supervisor of only the fact they cannot wear a respirator and need not provide the medical reason.

m. Fit Test Recordkeeping.

(1) After the completion of the protocol the Fit Test Evaluator must ask the test subject to describe the comfort of the respirator. If the comfort is described as unacceptable, first loosen and reset the respirator and retest. If the straps must be overtightened to enable to pass the test; then another size or model (and retest) would be appropriate.

(2) The Fit Test Evaluator must document the fit test by employee, date, and respirator type the employee is approved to wear on an individual FAA Form 3900-45 Respiratory Fit Test. Employees assigned multiple respirators would have multiple fit test records. The Fit Test Evaluator must ensure a copy is sent to the FAA Occ Med Program at 9-FAA-OCCMED-Rec-Submit@faa.gov. The FAA Occ Med Record Clerk will add the paperwork into the individual's EMF.

(3) A copy of the record must be provided to the employee.

Appendix D. Definitions

The following terminology is provided based upon regulatory or industry standards.

Referenced Terminology	Definition and reference if applicable
Aerosol	A substance consisting of particles, solid, or liquid, suspended in air.
APR	APRs protect by filtering particles out of the air the user is breathing.
APF	The workplace level of respiratory protection a respirator or class of respirator is expected to provide to employees, see 1910.134(d)(3)(i)(A).
Canister or Cartridge	A container with a filter, sorbent, catalyst, or combination of these items, which removes specific contaminants from the air passed through the container, see 29 CFR 1910.134(b). Canisters provide a larger amount of filter media than cartridges and if utilized lengthen the period for the change out schedule period.
Change Out Schedule	If a canister or cartridge air-purifying respirator for the protection against gases and vapors does not have an ESLI, then the ATO must implement a change out schedule based on objective information to ensure the canister or cartridge are replaced before the end of their service life., see 1910.134(d)(3)(iii)(B)(2). A change out schedule must indicate how often canisters or cartridges should be replaced and what information was relied upon to make this judgment. A canister or cartridge's useful service life is how long it provides adequate protection from airborne hazards. The service life of a canister or cartridge depends upon many factors, including environmental conditions, breathing rate, canister or cartridge filtering capacity, and the airborne hazards. The ATO will apply a safety factor to the service life estimate to assure that the change out schedule is a conservative estimate based upon workplace conditions.
Change Out Schedule ESLI	Respirator canister or cartridge indicator, which indicates when the sorbent is approaching saturation or no longer effective and visually notifies the respirator users to replace the canister or cartridge.
Change Out Schedule - Manufacturers Objective Data	Respirator canister or cartridge model-specific objective data that are available from the manufacturer or through a distributor may be used to establish change out schedules. Most manufacturers provide information on their website to help in determining the appropriate change out schedule for their product. Objective data may be presented in tabular or graphical format or simply provided verbally over a manufacturer's telephone help line. Some manufacturers have developed elaborate computer programs available on the internet that provide the necessary objective data to the Safety and Health Specialist.

Referenced Terminology	Definition and reference if applicable
Change Out Schedule – Best Practices	Generalized rules or guidance can be generated from experimental work. Presented below is a guidelines for estimating organic vapor service life found in the American Industrial Hygiene Association publication, The Occupational Environment: Its Evaluation, Control, and Management Chapter 36: • If a chemical's boiling point is >70° C and the concentration is less than 200 ppm, expect a service life of 8 hours at a normal work rate. • Service life is inversely proportional to flow rate. • Reducing concentration by a factor of ten will increase service life by a factor of five. • Humidity above 85% will reduce service life by 50%. These generalizations should only be used in concert with one of the other methods of predicting service life for specific contaminants.
Dust Mask	Outside of the OSHA particulate filtering facepiece definition, dust masks, which are not NIOSH-approved, usually have a single strap, yet may have an exhalation valve and metal bridge nose strip. Masks, which are not NIOSH-approved do not require a fit test and are not covered under the ATO RPP.
Filter or air-purifying element	A component used in respirators to remove solid or liquid aerosols from the inspired air, see 29 CFR 1910.134(b).
Particulate Filtering Facepiece APR - N95, N99, or N100	Filters at least 95%, 99%, 99.97% of airborne particles greater than 0.3 µm respectively. The N indicates the filter is not resistant to oil; see NIOSH 42 CFR PART 84 Approval of Respiratory Protective Devices.
Particulate Filtering Facepiece APR - P95, P99, or P100	Filters at least 95%, 99%, 99.97% of airborne particles greater than 0.3 µm respectively. The P indicates the filter is strongly resistant to oil or oil-proof; see NIOSH 42 CFR PART 84 Approval of Respiratory Protective Devices.
Particulate Filtering Facepiece APR - R95, R99, or R100	Filters at least 95%, 99%, 99.97% of airborne particles greater than 0.3 µm. The R indicates somewhat resistant to oil; see NIOSH 42 CFR PART 84 Approval of Respiratory Protective Devices.
Fit Factor	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 the concentration inside the respirator worn.
Fit Testing	Fit testing is a protocol to QLFT or QNFT evaluate the fit of a respirator on an individual.
HEPA filter	A filter that is 99.97% efficient in removing monodispersed particles of 0.3 µm in diameter and includes N100, R100, and P100 particulate filtering facepiece APR and HEPA cartridges for elastomeric APRs.
MUC	Maximum airborne concentration of a hazardous substance from which an employee may be expected to be protected using the selected respirator and filter, see 1910.134(d)(3)(i)(B).
QLFT	QLFT protocol that assess the adequacy of respirator fit, relies on the individual's response to the test agent, and is recorded as a pass or fail.
QNFT	QNFT protocol that access the adequacy of respirator fit by numerically measuring the amount of leakage into the respirator.

Referenced Terminology	Definition and reference if applicable
Rainbow Passage	A standard reading passage found within the OSHA Respirator Standard, which includes a variety of accents, syllabic styles, and English phonemes while performed. 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 reach, his friends say he is looking for the pot of gold at the end of the rainbow.
Respiratory Medical Evaluation	Respiratory medical evaluations must be completed to determine the employee's ability to use a respirator; before the employee is, fit tested or required to use the respirator in the workplace.
Respiratory profile	The respiratory profile is a predetermined specific respirator use summary, which the Safety and Health Specialist creates. Employees tasked to complete the respiratory medical evaluation questionnaire online will be paired with the applicable respiratory profile. The PLHCP then reviews the employee responses and the respiratory profile to determine if the employee is allowed to use a respirator. Respiratory profiles consist of: • Type of respirator assigned and filtering media assigned. • Use characteristics including frequency of use and workplace description. • Expected level of physical effort while wearing the respirator. • Additional protective clothing and equipment to be worn. • Temperature, humidity, and altitude extremes to be encountered. • Additional hazards, i.e., permit required confined space, oxygen deficient, and hyperbaric (diver) conditions. These are unlikely ATO activities.
Safety and Health Specialist	The Safety and Health Specialist is a regulatory defined role within 29 CFR 1960.2(s). Qualifications are found within Executive Order 12196 and 29 CFR 1960.25(a). In the context of a RPP trained Safety and Health Specialist, the Safety and Health Specialist must have the competence to recognize and evaluate hazards of the workplace and must be able to suggest general abatement procedures. The Safety and Health Specialist must have the necessary equipment or data to determine workplace hazards.
Safety Data Sheets	The Hazard Communication standard requires the inventory of hazardous contaminants in the workplace and to maintain copies of SDS for each hazardous contaminant. The SDS is reviewed during Workplace Hazard Assessments and in determining respirator assignment and use, see 1910.1200(e)(1)(i) and 1910.1200(g)(1).

Referenced Terminology	Definition and reference if applicable
User Seal Check	A required procedure for all tight-fitting respirators after donning and prior to actual use in the workplace. It is conducted by the respirator user to determine if the respirator is properly seated to the face, see DHHS Publication 2018-130 and OSHA 29 CFR 1910.134 Appendix B-1 User Seal Check Procedures (Mandatory).
Surgical Mask	The surgical dust mask is a cloth mask used in medical institutions with a strap on both sides to loop around the ears. These are not respirators, they are not NIOSH-approved, they do not require fit testing, and are not a component of the ATO RPP.
Threshold Screening	Odor threshold screening is performed without wearing a respirator and is intended to determine if the individual being fit tested can detect, taste, or react to the QLFT test aerosol.
Vapor	The gaseous state of a substance that is solid or liquid at ordinary temperature and pressure.
Workplace Hazard Assessment	Each workplace must be accessed to determine if hazards are present, or are likely to be present, which necessitate the use of PPE, including respirators. If such hazards are present, or likely to be present, the ATO must select, and have each affected employee use, the types of PPE that will protect the affected employee from the hazards identified in the hazard assessment. The ATO must communicate selection decisions to each affected employee; and, select PPE that properly fits each affected employee. The ATO must verify that the required Workplace Hazard Assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the date(s) of the hazard assessment; and, which identifies the document as a certification of hazard assessment. Paraphrased from 29 CFR 1910.134, note an example of procedures that would comply with the requirement for a Workplace Hazard Assessment are included in 29 CFR 1910 Subpart I Appendix B Nonmandatory Compliance Guidelines for Hazard Assessment and Personal Protective Equipment Selection.
Workplace Hazard Assessment - Environmental screening	Estimating potential employee exposures based on the concentrations of hazardous substances in the general workplace environment.
Workplace Hazard Assessment - Historical data	Exposure data previously obtained during workplace operations conducted under conditions closely resembling the processes, types of material, control methods, workplace practices, and environmental conditions in the current workplace operations.
Workplace Hazard Assessment - Mathematical approaches	The preamble to the 1998 final rule (63 Federal Register 1199) states that employers may use data on the physical and chemical properties of air contaminants, combined with information on room dimensions, air exchange rates, contaminant release rates, and other pertinent data (including exposure patterns and workplace practices) to estimate the maximum exposure to be anticipated in the workplace.

Referenced Terminology	Definition and reference if applicable
Workplace Hazard Assessment - Objective data	Exposure data obtained from industry studies, trade associations, or manufacturers, which may be used to estimate airborne concentrations in the workplace.
Workplace Hazard Assessment - Personal sampling	Personal sampling is the most reliable method to estimate an employee's exposures and measures concentration of hazardous airborne substances in the breathing zone. When the ATO performs personal sampling, Safety and Health Specialists must use validated methods, such as the OSHA Sampling and Analytical Methods or those in the NIOSH Manual of Analytical Methods protocols. Sample results should be compared to exposure limits such as the OSHA PEL.

Appendix E. Acronyms

Acronym	Definition
µm	Micrometer
APF	Assigned Protection Factor
APR	Air Purifying Respirators
ATO	Air Traffic Organization
CDC	Center for Disease Control
CFR	Code of Federal Regulations
CIH	Certified Industrial Hygienist
CL	Ceiling Limit
CNC	Condensation Nuclei Counter
CNP	Controlled Negative Pressure
COVID-19	Coronavirus Disease 2019
EMF	Employee Medical Folder
EMFS	Employee Medical File System
ESLI	End of Service Life Indicators
FAA	Federal Aviation Administration
FOH	Federal Occupational Health
HAZCOM	Hazard Communication
HEPA	High Efficiency Particulate Air
HIPAA	Health Insurance Portability and Accountability Act
IAA	Interagency Agreement & Isoamyl Acetate vapor
IDLH	Immediately Dangerous to Life and Health
Li-ion	Lithium ion
LMS	Learning Management System
MUC	Maximum Use Concentration
N	Not Resistant to Oil
NEA	Negative Exposure Assessment
NIOSH	National Institute for Occupational Safety and Health
Occ Med	Occupational Medical
OPR	Office of Primary Responsibility
OSHA	Occupational Safety and Health Administration
P	Strongly Resistant to Oil, or Oil-Proof
PAPR	Powered Air Purifying Respirators
PEL	Permissible Exposure Limit (OSHA)
PII	Personally Identifiable Information
PLHCP	Physician or other Licensed Health Care Professional
POC	Point of Contact
PPE	Personal Protective Equipment
QLFT	Qualitative Fit Testing
QNFT	Quantitative Fit Testing
R	Somewhat Resistant to Oil
REDON	OSHA terminology regarding a specific quantitative fit test procedure
RPP	Respiratory Protection Program
Rx	Prescription
SA	Service Unit
SAR	Supplied Airline Respirators
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2
SCBA	Self-Contained Breathing Apparatus
SDS	Safety Data Sheet
SME	Subject Matter Expert
SOP	Standard Operating Procedure

Acronym	Definition
STEL	Short Term Exposure Limit
VOC	Volatile Organic Compounds

Appendix F. Document Feedback Information

Please submit all comments in written form, include recommendations for improving this document, suggestions for new related subjects, and errors. Send these via email to:

To: Document OPR: AJW-23 email: 9-FAA-OCCMED-Rec-Submit@faa.gov
Subject: ATO JO Order 3900.XX, ATO RPP – Document Feedback/Revision Suggestions

Please provide as much information as possible to the OPR, for example:

An error, procedural, or typographical item in paragraph _____ on page _____ should be changed to _____ (attach separate sheet as necessary).

In future revisions of this document, please include coverage on the following subject _____ (describe the specific language to add, include OSH regulatory references if applicable).

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