



U.S. DEPARTMENT OF TRANSPORTATION  
FEDERAL AVIATION ADMINISTRATION

ORDER  
3900.19C

National Policy

03/11/2019

**SUBJ:** Federal Aviation Administration (FAA) Occupational Safety and Health Policy

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1. This order establishes a FAA-wide Occupational Safety and Health (OSH) Policy. The goal of this policy is to provide FAA employees with workplaces free from recognized hazards and prevents or minimizes occupational exposures, injuries, and illnesses by anticipating, recognizing, evaluating, and controlling these hazards to the extent possible. No employee shall be required or instructed to work in surroundings or under conditions that are unsafe and dangerous to his or her health.
2. This order outlines the requirements for the FAA OSH Policy. More stringent FAA workplace requirements may be necessary based upon workplace analysis.
3. This order does not include organizational implementation procedures, instructions, or specific organizational roles and responsibilities. Lines of Business (LOB), Staff Offices, and sub-Organizations are permitted to develop implementation processes, directives, and standard operating procedures which are more stringent than the requirements contained within this order.

A handwritten signature in black ink that reads "DK Elwell".

Daniel K. Elwell  
Acting Administrator

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## Chapter 1. General Information

**1-1. Purpose of This Order.** This order establishes policy, delegates authority, and assigns broad responsibilities to ensure each FAA organization complies with the Occupational Safety and Health Act requirements and related regulations as noted within this document. This order is specific to OSH policy and protecting employees from injury and illness. This order is written in broad terms to address the entire FAA.

**1-2. Audience.** This order applies to all FAA employees.

**1-3. Where Can I Find This Order.** You can find an electronic copy of this order on the Directives Management System (DMS) website: [https://employees.faa.gov/tools\\_resources/orders\\_notices/](https://employees.faa.gov/tools_resources/orders_notices/). Or go to the MyFAA Website, select 'Tools and Resources', then select 'Orders and Notices'.

**1-4. What This Order Cancels.** This order cancels FAA Order 3900.19B, FAA Occupational Safety and Health Program.

**1-5. Authority to Change This Order.** The FAA's Designated Agency Safety and Health Official (DASHO) is the Office of Primary Responsibility (OPR) with the authority to modify this order. The DASHO must assign staff with the appropriate technical expertise necessary to conduct order revisions.

**1-6. Explanation of Policy Change.** This revision extensively updates FAA Order 3900.19B, FAA Occupational Safety and Health Program originally issued in 1999. The order eliminates prescriptive requirements and implementation details. Major changes include the following:

**a. Terminology.** The order's title was renamed to emphasize the change in scope from Occupational Safety and Health "Program" to "Policy".

**b. Requirements.** The prescriptive requirements and implementation processes were eliminated and there was an expansion into more OSH subject topics.

**c. Organizational References.** Organizational references were eliminated. Revised roles and responsibilities are generic and taken primarily from Federal requirements within [Title 29 of the Code of Federal Regulations \(29 CFR\) § 1960](#).

**d. References.** Descriptive Federal regulatory requirements and consensus standards incorporated by reference (IBR) within regulatory requirements were added.

**e. Standard Chapter Sections and Subsections.** This order is issued with a consistent chapter structure:

(1) Chapter 1, "General Information", presents an introduction for this order, including broad FAA roles and responsibilities.

(2) Chapter 2, “Basic Occupational Safety and Health Policy Elements”, primarily addresses the requirements within [29 CFR § 1960](#).

(3) Chapter 3, “Recording and Reporting Occupational Injuries and Illnesses”, primarily addresses the requirements within [29 CFR § 1904](#).

(4) The Chapters 4 through 16, primarily addresses the applicable subpart requirements within [29 CFR § 1910](#).

(5) Chapter 17, “Construction Safety and Health”, primarily addresses the requirements within [29 CFR § 1926](#).

(6) Within Technical Chapters 2 through 17, standard sections and subsections include:

(a) Section One (‘Chapter number’-1) provides the “Introduction” and includes the Chapter’s emphasis on the particular regulation or [29 CFR § 1910](#) subpart.

(b) Section Two (‘Chapter number’ -2) provides the “Policy” for the individual section topic.

(c) Within each Section Two, standard subsections include:

(i) Subsection a, “Scope”, describes how the policy is applicable and specifies out of scope components if applicable.

(ii) Subsection b, “Objectives”, lists the primary objectives for regulatory compliance; details would be included within the regulatory subsections.

(iii) Subsection c, “Regulatory Requirements”, provides the Federal regulatory requirement references and consensus standard references that have been IBR within the specific section of the CFR title.

(iv) Subsection d, “Additional FAA OSH Standards and Policy”, provides other requirements including FAA orders and policy.

(7) The appendixes of this order include “Acronyms” and a process for employees to provide input to the OPR on updates: “[FAA Form 1320-19 Directive Feedback Information](#)”.

**1-7. Action Date.** This order will become effective 1 year after signature and publication.

**1-8. Policy.** The subsequent sections of this chapter establish the guiding principles for FAA organizational OSH Policy development and for the development of related procedures. To be most effective, safety and health must be balanced with, and incorporated into the core FAA business processes. This policy is aligned with the [Recommended Practices for Safety and Health Programs \(Occupational Safety and Health Administration \(OSHA\) 3885\)](#) and [Recommended Practices for Safety and Health Programs in Construction](#), as described in the section below.

**a. Management Leadership and Employee Participation.** Management leadership and employee involvement are necessary for a successful Agency OSH Policy. Management leadership provides the motivating force and the resources for organizing and controlling FAA activities. Management must regard OSH as a fundamental value and provide employees with

the means to express their own commitment to safety and health in the workplace. This is demonstrated when the FAA:

- (1) Develops and communicates OSH policy to all employees.
- (2) Demonstrates management commitment by requiring managers to be accountability for OSH, obeying safety and health rules, and reviewing accident reports.
- (3) Conducts regular OSH meetings involving employees and Frontline Managers/Supervisors.
- (4) Assigns responsible qualified individuals to coordinate and implement OSH activities.
- (5) Integrates OSH into business practices (e.g., acquisitions, design, procurement, and development).
- (6) Involves employees in OSH-related activities (e.g., self-reporting of OSH concerns, accident investigations, provide OSH information relevant to their job, and developing safe and healthy work practices).
- (7) Recognizes employees for commitment to OSH work practices.

**b. Workplace Hazard Identification and Assessment.** Workplace hazard identification and assessment means Frontline Managers/Supervisors with the support of Safety and Health Specialists and Inspectors when necessary will analyze all workplace conditions to identify and eliminate potential and existing hazards to the extent possible. Workplace analysis is supported by employees in the workplace when they identify and report hazards to Frontline Managers/Supervisors. This includes a comprehensive baseline survey, with a system in place for periodic updates. Workplace analysis involves a variety of workplace examinations to identify, not only existing hazards, but also conditions and operations in which changes have the potential to create hazards. Effective OSH management actively analyzes the occupational activity and the workplace to anticipate and control harmful occurrences. This is demonstrated when the FAA:

- (1) Evaluates all workplace activities and processes for OSH hazards.
- (2) Reevaluates workplace activities when there are changes in processes, materials, or equipment.
- (3) Conducts workplace inspections, identifies OSH hazards, prioritizes the hazard controls, and implements interim control measures and corrective actions.
- (4) Provides a hazard reporting system for employees to report unsafe and unhealthful conditions.
- (5) Investigates all OSH related accidents and near misses to determine root causes.

**c. Workplace Hazard Prevention and Control.** Hazard prevention and control are triggered by a determination that a potential or an existing occupational hazard exists. Where feasible, hazards are eliminated by effective workplace design and/or practices. Where it is not feasible to eliminate them, they are controlled to prevent unsafe and unhealthful working

conditions. Hazard elimination or control is accomplished in a timely manner, once an occupational hazard is recognized. Hazard prevention and control include:

- (1) Eliminate or otherwise control workplace hazards (e.g., substitution, engineering controls, administrative controls, workstation design, workplace practices, and personnel protective equipment) by identifying, selecting, and implementing controls.
- (2) Establishes preventive maintenance policy.
- (3) Keeps employees informed of OSH activities and conditions.
- (4) Plans for emergencies (e.g., evacuation plan, employee training, and conducting fire drills).
- (5) Records and analyzes occupational injuries and illnesses.

**d. Safety and Health Education and Training.** OSH Training is often most effective when incorporated into other training-related performance requirements and work practices. The amount of training depends on the workplace size, complexity, and potential or existing occupational hazards at the workplace. This is demonstrated when the FAA:

- (1) Provides training on specific safe and healthy work practices before an employee begins work, including specific OSH training mandated by regulation and policy.
- (2) Provides additional training for new occupational processes.
- (3) Provides additional training as required to enhance employee awareness, which contribute to prevent accidents, mishaps, and near misses.
- (4) Provides refresher training on a routine basis as required.

**e. Program Evaluation and Improvement.** Agency efforts to provide a safe and healthful workplace include continual improvement by evaluating OSH efforts. This is demonstrated when the FAA:

- (1) Tracks OSH progress and performance.
- (2) Verify program elements are implemented.
- (3) Improve elements when identified.

**f. Communicate and Coordinate at Multi-Employer Workplaces.** Employee's workplaces may include non-Agency managed locations. This is demonstrated when the FAA provides effective communication of programs and hazards to multi-employers and their employees (See Paragraph 1-10(c)).

**1-9. OSH Policy References.** The FAA will comply with OSHA regulations. Specific FAA OSH Policies have unique requirements and may include state and local regulations, where applicable. (Questions on the applicability of state and local OSH 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. CFR.** CFR titles and sections include, but are not limited to the following OSH requirements:

- (1) [29 CFR § 1904 Recording and Reporting Occupational Injuries and Illnesses.](#)
- (2) [29 CFR § 1910 Occupational Safety and Health Standards.](#)
- (3) [29 CFR § 1926 Safety and Health Regulations for Construction.](#)
- (4) [29 CFR § 1960 Basic Program Elements for Federal Employee OSH Programs and Related Matters.](#)

**b. Executive Orders (EO).** The FAA will follow OSH-related EO including [EO 12196 Occupational Safety and Health Programs for Federal Employees.](#)

**c. FAA Orders.** The FAA must follow all OSH-requirements within FAA orders and policy. The FAA must update any FAA orders that have not met the requirements within OSHA regulations. FAA orders must comply with or exceed all applicable regulatory requirements. The OPR of any such inconsistent FAA order must resolve conflicts with OSHA regulations.

**d. National Consensus, Technical Standards, and Codes.** The FAA will apply IBR national consensus and technical standards codified in Federal regulations. Many of these standards are outdated, withdrawn, and replaced. OSHA has a policy of issuing "de minimis" notices to employers who comply with more current versions of IBR standards, to the extent that the more current versions are at least as protective as the older versions (see [29 CFR § 1903.14\(a\)](#)). Additionally, [40 United States \(U.S.\) Code \(USC\) 3312](#) states each building constructed or altered by a federal agency shall be constructed or altered to the maximum extent feasible as determined by the Administrator in compliance with one of the nationally recognized model building codes and other recognized codes. The Administrator shall use the latest edition of the nationally recognized codes. This code addresses zoning and cooperation with state and local officials. (Questions on the applicability of state and local OSH requirements should be referred to the Office of the Chief Counsel for an evaluation of the supremacy clause and sovereign immunity implication.)

**1-10. Order Scope Regarding Location.** This order will pertain to all workplaces where FAA employees conduct occupational activities. This includes:

**a. FAA Owned and Leased Workplaces.** In addition to the policy prescribed by this order, FAA workplaces within General Services Administration (GSA) managed workplaces also follow provisions within the Federal Property Management Regulations System [41 CFR § 102-80 Safety and Environmental Management](#). Leased workplaces might be exempt from more stringent FAA requirements if these stringent requirements are not included within the lease contractual agreement.

**b. Non-FAA Controlled Workplaces.** FAA workplaces within private and non-FAA controlled workplaces must follow regulations pertinent to the workplace's geographic location.

(1) Workplaces in the U.S. must follow Federal, State, and/or local OSH regulations as required. FAA employees on official duty at a private sector's establishments are covered by the FAA's OSH Policy. Although the FAA may not have the authority to require abatement of hazardous conditions in a private sector workplace, the FAA must ensure safe and

healthful working conditions for FAA employees. This must be accomplished by administrative controls, personal protective equipment, or withdrawal of FAA employees from the private sector's workplace to the extent necessary to ensure FAA employees are protected.

(2) International workplace's regulatory policy differs from those in the U.S. Employees, in these situations and determine their occupational duties cannot be performed due to an unsafe working condition, must notify their Frontline Manager/Supervisor, and not conduct activities that may potentially endanger their safety and health.

**c. Multiple Employer Workplaces.** A multiple employer workplace is a workplace where two or more employers operate, and where one employer's activities could affect the safety and health of other employer's employee(s). The Frontline Managers/Supervisors remain responsible for the well-being of their employees during their time at the workplace, and each FAA employee must comply with FAA OSH requirements. Depending on workplace-specific conditions, the FAA potentially could serve one or many of the following roles (per [OSHA Compliance Directives CPL 02-00-124 Multi-Employer Citation Policy](#)) and based on workplace-specific conditions, must act responsibly in the hazard identification and/or abatement (Questions on the applicability of state and local OSH requirements should be referred to the Office of the Chief Counsel for an evaluation of the supremacy clause and sovereign immunity implication). These roles are identified as follows:

(1) **Creating Employer.** The employer who caused a hazardous condition and/or violates an OSHA regulation.

(2) **Exposing Employer.** The employer whose own employees are exposed to the hazardous condition.

(3) **Correcting Employer.** An employer who is engaged in a common undertaking in the same workplace as the Exposing Employer, and is responsible for correcting a hazard. This usually occurs where an Employer is given the responsibility of installing and/or maintaining particular safety and health equipment or devices.

(4) **Controlling Employer.** An employer who has general supervisory authority over the workplace, including the power to correct safety and health violations or require others to correct them. Control may be established by contract or, in the absence of explicit contractual provisions, by the exercise of control in practice.

## **1-11. Roles and Responsibilities.**

**a. Administrator.** The Administrator must:

(1) Designate an official, the Designated Agency Safety and Health Official (DASHO), with sufficient authority and responsibility to represent effectively the interest, support, management, and administration of the FAA's OSH Policy per [29 CFR § 1960.6](#). In this capacity, the Administrator must ensure the DASHO, has sufficient headquarters staff with the necessary training and experience to carry out the responsibilities.

(2) Authorize the DASHO to serve as the OPR for this order.

(3) Ensure the FAA budget submission includes appropriate financial and other resources to effectively implement and administer the FAA's OSH Policy per [29 CFR § 1960.7\(a\)](#).

(4) Furnish each employee, to the extent possible, a safe and healthful workplace free from recognized hazards likely to cause death or serious physical harm.

(5) Require all managers to provide employees with an environment promoting open sharing of safety and health concerns, without fear of reprisal and in which concerns are addressed.

(6) Serve as the Authority Having Jurisdiction, and is permitted to invoke, at their discretion, the requirements of other codes not listed or applicable by reference, where special circumstances exist in which hazards are not adequately addressed.

**b. DASHO.** The DASHO must:

(1) Assist the Administrator to ensure a comprehensive and compliant OSH Policy and program is administered for FAA employees. The DASHO is an individual with sufficient authority to represent the interest and support of the FAA Administrator and is responsible for the management and administration of the Agency OSH program. The DASHO will determine the appropriate FAA organization(s) having authority to manage and administer FAA-wide OSH responsibilities such as the Occupational Medical Surveillance and Recordkeeping Program or the handling of allegations of OSH Reprisals. As such, the DASHO will issue to all FAA employees an OSH Points of Contacts (POC) and FAA-wide OSH related Program contacts list including specific Lines of Business, Staff Offices, and Centers via FAA Broadcast and on the [My FAA OSH Website](#). This list will be updated as necessary to remain current and reflect organizational changes.

(2) Where duties prescribed in this order are described as being the responsibility of the DASHO, the DASHO may delegate such duties at his/her discretion and appoint personnel as needed to carry out such functions.

(3) Act for the Administrator in inter-organizational or inter-FAA OSH matters.

(4) Plan, request resources, implement, and evaluate the OSH Policy budget in accordance with all relevant Office of Management and Budget regulations and documents per [29 CFR § 1960.7\(b\)](#).

(5) Issue FAA OSH Policy and Directives.

(6) Ensure a set of procedures to effectively implements the Agency policy, considering the mission, size, and organization of the Agency.

(7) Ensure the issuance of plans and procedures for evaluating the Agency's OSH policy effectiveness at all operational levels.

(8) Ensure OSH policy is implemented throughout the FAA following the regulatory provisions outlined within this order.

**c. FAA Executive-level Management.** For their respective organizations, FAA Executive-level Management must:

- (1) Ensure all levels of management are aware of and perform OSH responsibilities to provide a safe and healthful workplace to the extent possible.
- (2) Ensure adequate funds and resources are identified and requested to perform LOB specific OSH Policy development as described in Section 1-8. If funds are unavailable and/or mitigation procedures are not feasible, the FAA must not allow employees to work in these unsafe and unhealthy environments.
- (3) Ensure OSH requirements are included in the lifecycle management process, to include personnel safety and health communications in maintenance and technical publications.
- (4) Ensure OSH requirements are included in the acquisition process (including pre-contract awards), leases, designs, and acceptance testing protocols. Ensure compliance with this order and incorporation within the design and acquisition of emerging and deployed systems and equipment and real property management.
- (5) Incorporate applicable OSH requirements into statements of work, specifications, and other contractual documents.
- (6) Notify the DASHO of all incidents covered by OSHA reporting requirements, [29 CFR 1904.39](#), within the allotted time using the proper chain of command. These incidents include all work-related fatalities, in-patient hospitalizations of one or more employees, amputations, and losses of an eye.
- (7) Provide employees with an environment promoting open sharing of safety and health concerns without fear of reprisal and ensure OSH concerns are addressed.
- (8) Maintain OSH compliance in all FAA-controlled and leased workplaces.
- (9) Ensure Safety and Health Specialists, Safety and Health Inspectors, or Collateral Duty Safety and Health (CDSH) Employees are consulted as appropriate for all OSH-related issues.
- (10) Ensure occupational safety and health committees are organized in accordance with [29 CFR 1960 Subpart F](#) (1960.36-41).

**d. Frontline Managers/Supervisors.** Frontline Managers/Supervisors must:

- (1) Ensure compliance with the requirements of this order including [29 CFR § 1960.9](#) for themselves and the employees they supervise.
- (2) Ensure the OSH of employees is maintained by eliminating or controlling hazards in a timely fashion. If hazards cannot be eliminated or controls are not feasible, the FAA manager must not allow employees to work in these environments.
- (3) Ensure the availability of personal protective equipment (PPE) and OSH equipment and enforce the proper use and care of this equipment.
- (4) Ensure Occupational Medical Surveillance and Recordkeeping is provided to affected employees identified for enrollment. Once enrolled, ensure affected and identified employees attend, participate, and complete the required surveillance activities.
- (5) Ensure Safety and Health Specialists, Safety and Health Inspectors, or CDSH Employees are consulted as appropriate for OSH-related issues.

(6) Ensure employees on official duty in non-FAA controlled workplaces are provided administrative controls and PPE as necessary to conduct duties safely and healthily. Where an employee is unable to conduct duties safely and healthily, ensure employees are mandated to leave workplaces where the employee's safety and health cannot be ensured.

(7) Ensure all identified employees are enrolled, participate in, and complete all required OSH-related training.

**e. Safety and Health Specialist.** Provide Frontline Managers/Supervisors with guidance in the identification, evaluation, and control of safety and health hazards in workplaces and assist in developing recommended mitigation plans. Safety and Health Specialists must meet the basic requirements and qualifications as noted in [29 CFR § 1960.2\(s\)](#) and [29 CFR § 1960.25](#).

**f. Safety and Health Inspector.** Provide workplace inspections for Frontline Managers/Supervisors to identify, evaluate, and control safety and health hazards and develop recommended mitigation plans. Safety and Health Inspectors must meet the basic requirements and qualifications as noted in [29 CFR § 1960.2\(q\)](#) and [29 CFR § 1960.25](#).

**g. Collateral Duty Safety and Health (CDSH) Employees.** In workplaces where there are no full-time Safety and Health Specialists, the Frontline Managers/Supervisors may designate a CDSH to perform the safety and health-related duties appropriate to the workplace size and function. Designation of a CDSH employee requires the FAA to provide OSH training commensurate with the employee's assigned duties per [29 CFR § 1960.58](#).

**h. Employees.** Employees must:

(1) If identified and assigned, participate in all OSH-related training, instruction, maintenance, and use of PPE, safety and health equipment, and other occupational related devices.

(2) If identified and assigned, participate in all required activities of the Occupational Medical Surveillance and Recordkeeping processes.

(3) Observe safe and healthy work practices and report observed unsafe and unhealthful working conditions in the workplace.

(4) Have the right to participate in mishap investigations to help prevent recurrence and improve employee safety and health.

(5) Suspend occupational activities that could endanger their safety and health or the safety and health of their co-workers. If the occupational activities cannot be conducted due to an imminent dangerous condition or practice, employees must not perform the work, and must report the condition to the Frontline Manager/Supervisor.

(6) Immediately notify fellow employees in an area where an imminent dangerous condition or practice is observed, and then notify management. An imminent danger may occur in any place of employment, which could reasonably be expected to cause death or serious physical harm immediately or before the imminence of such danger can be eliminated.

(7) Not perform OSH evaluations, testing, or hazard abatement without consent from an FAA Safety and Health Specialist. Correction of minor safety issues by employees

competent to complete these minor tasks is encouraged with Frontline Managers/Supervisors' consent and approval.

(8) Comply with this order and the requirements within [29 CFR § 1960.10](#)

**i. Specific LOB, Staff Offices, and Centers Roles and Responsibilities.** LOB, Staff Office, and Center must:

(1) Identify and assign Safety and Health Specialists, Safety and Health Inspectors, and CDSH Employees as necessary to implement and manage the program requirements to maintain compliance.

(2) FAA employees will find roles and responsibilities for OSH POCs on the [My FAA OSH Website](#).

**j. Occupational Safety and Health Committees.** The Agency must:

(1) Follow the provisions within [29 CFR 1960 Subpart F](#) (1960.36-41) regarding committee organization, formation, communication, Agency responsibilities, and membership duties.

(2) Follow the [FAA Occupational Safety, Health, and Environmental Compliance Committee \(OSHECCOM\) Charter](#).

## Chapter 2. Basic Occupational Safety and Health Policy Elements

**2-1. Introduction.** This chapter establishes policy for the following topics: OSH Program Evaluation; Professional Qualifications and Training of OSH Staff; OSH Training and Awareness; Workplace Inspection, Hazard Abatement, and Variance; and Hazard Analysis. The FAA must provide each employee, with a place of employment free from recognized hazards likely to cause death or serious physical harm. The FAA must implement an OSH Policy which identifies and controls these hazards. Where no specific OSH Policy exists, the FAA must implement OSH Policies ensuring employee safety and health. This chapter primarily addresses [29 CFR § 1960 Basic Program Elements for Federal Employee OSH Programs and Related Matters](#). 29 CFR § 1960 Subparts are embedded within this order in the following paragraphs:

- a. [29 CFR § 1960 Subpart A – General](#) {See Paragraph 1-9 and 1-11}.
- b. [29 CFR § 1960 Subpart B – Administration](#) {See Paragraph 1-11}.
- c. [29 CFR § 1960 Subpart C – Standards](#) {See Paragraph 1-9}.
- d. [29 CFR § 1960 Subpart D – Inspection and Abatement](#) {See Paragraph 1-10, 1-11, 2-3, 2-5, and 5-2}.
- e. [29 CFR § 1960 Subpart E – General Services Administration and Other Federal Agencies](#) {See Paragraph 2-5 and 5-2}.
- f. [29 CFR § 1960 Subpart F – Occupational Safety and Health Committees](#) {See Paragraph 1-11}.
- g. [29 CFR § 1960 Subpart G – Allegations of Reprisal](#) {See Paragraph [FAA Order 3370.14 FAA Procedures for Responding to Allegations of Occupational Safety and Health \(OSH\) Reprisals](#)}.
- h. [29 CFR § 1960 Subpart H – Training](#) {See Paragraph 2-3 and 2-4}.
- i. [29 CFR § 1960 Subpart I – Recordkeeping and Reporting Requirements](#) {See Paragraph 1-11 and 3-2}.
- j. [29 CFR § 1960 Subpart J – Evaluation of Federal Occupational Safety and Health Programs](#) {See Paragraph 2-2}.
- k. [29 CFR § 1960 Subpart K – Field Federal Safety and Health Councils](#) {See Paragraph 1-11 and 2-2}.

### 2-2. OSH Program Evaluation Policy.

a. **Scope.** The scope of this section includes, but is not limited to, the FAA ensuring the performance of an OSH evaluation of all FAA organizations. As applicable, the information and products resulting from this review must be incorporated into the overall OSH Policy process.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Ensuring management leadership and employee participation.
- (2) Evaluating workplace inspection and analysis.
- (3) Performing hazard prevention and control.
- (4) Providing safety and health training.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1960.8 Agency responsibilities.](#)
- (2) [29 CFR § 1960.78 Purpose and scope.](#)
- (3) [29 CFR § 1960.79 Self-evaluations of occupational safety and health programs.](#)

**d. Additional FAA OSH Standards and Policy.** This policy is designed to meet the compliance requirements in the following: Annual OSH Program Evaluation Report, issued by the DASHO to the Department of Transportation (DOT) per [EO 12196 Occupational Safety and Health Programs for Federal Employees.](#)

### **2-3. Professional Qualifications and Training of OSH Staff Policy.**

**a. Scope.** This scope includes, but is not limited to, the FAA ensuring assignment of competent OSH Staff (Safety and Health Specialists, Safety and Health Inspectors, and CDSH employees) who are an essential element of FAA OSH Policy effectiveness. OSH Staff training and qualifications include the minimum qualifications, recurrent training, and OSHA-required professional development requirements.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Identifying the minimum qualifications and training requirements for OSH staff.
- (2) Providing recurrent OSH training for OSH Staff through an appropriate selection of courses, professional development conferences, laboratory experiences, field study, on the occupational training, and other formal learning experiences to prepare them to perform the necessary technical monitoring, consulting, testing, inspecting, designing, and other tasks related to policy development and implementation. This includes hazard anticipation, recognition, evaluation and control, equipment and workplace design, analysis of accident, injury, and illness data, and other related tasks. The FAA must provide Safety and Health Inspectors who conduct workplace inspections, with recurrent training and appropriate equipment and testing procedures that will allow them to identify and evaluate hazards and enable them to provide suggested general abatement procedures during or following their assigned inspections. This includes the preparation of reports and other documentation to support the inspection findings.



(3) Developing and implementing an OSH career development policy for Safety and Health Specialists to enable them to meet FAA OSH policy. The goal of employee's OSH career development is to ensure there is an adequate base of qualified and trained professional and technical employees to meet the FAA's current and future needs.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB', Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1960.25 Qualifications of safety and health inspectors and agency inspections.](#)
- (2) [29 CFR § 1960.56 Training of Safety and Health Specialists.](#)
- (3) [29 CFR § 1960.57 Training of Safety and Health Inspectors.](#)
- (4) [29 CFR § 1960.58 Training of Collateral duty safety and health personnel and committee members.](#)

#### **2-4. Management and Employee OSH Training and Awareness Policy.**

**a. Scope.** This scope includes, but is not limited to, ensuring all FAA employees are provided the basic OSH knowledge and skills needed to perform intended occupational functions safely and healthily. The policy allows the FAA to provide appropriate safety and health training for each employee, including specialized OSH training appropriate to the work performed by the employee. Out of scope of this section is OSH staff training in Chapter 2, Section 2.3: Professional Qualifications and Training of OSH Staff Policy.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Providing top management officials with orientation and training to enable them to manage the OSH policy.
- (2) Providing initial and recurrent employee OSH training for all supervisory employees.
- (3) Providing employees with general OSH awareness training and specialized OSH training appropriate to the work performed. Employee OSH training must occur when an employee is hired or reassigned; and for recurrent training which is required when new equipment or processes are introduced, procedures are revised or updated, or employee performance indicates a need for additional training.
- (4) Ensuring each organization evaluates their OSH training needs at least annually.
- (5) Ensuring each organization maintains and has accessible OSH training records documenting competency.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1960.54 Training of top management officials.](#)

- (2) [29 CFR § 1960.55 Training of supervisors.](#)
- (3) [29 CFR § 1960.59 Training of employees and employee representatives.](#)
- (4) [29 CFR § 1960.60 Training assistance.](#)

## **2-5. Workplace Inspection, Hazard Abatement, and Variance Policy.**

**a. Scope.** This scope includes, but is not limited to, efforts to assess, manage, and maintain the OSH compliance of all FAA workplaces through the inspection of all designated workplaces; identification of workplace hazards; and management and abatement of identified hazards in a timely manner.

(1) The FAA interpretation of OSHA's definition of a [workplace](#) (29 CFR § 1960.2(t)) is any FAA-owned, maintained, occupied, or leased workplace, structure, or installation where FAA or FAA-contract employees routinely perform work as a part of their regular occupational duties. Workplaces may be either staffed or unstaffed, and may or may not have associated occupied structures.

(2) A hazard is a real or potential unsafe condition (e.g., working conditions, work materials, equipment, work methods or practices, etc.) with the potential to cause accidental death, injury, or occupational illness.

(3) A finding is a thoroughly documented and recorded hazard.

(4) A variance is an approved alternative to an accepted OSHA standard, when the FAA cannot comply with the accepted standard or the particulars of the standard cannot be implemented in the FAA occupational environment. Variances must clearly demonstrate an equal or greater level of employee protection as the original OSHA standard.

**b. Objectives.** The primary objectives include the following focus areas.

(1) The FAA must inspect its workplaces and abate hazards found in accordance with applicable regulatory standards and FAA policy.

(2) When the FAA cannot comply with or implement an accepted OSHA standard due to required work practices, facility/equipment configuration, or other factors, the FAA may request a variance. Variances must clearly demonstrate an equal or greater level of employee protection as the original OSHA standard, and must be submitted in writing. Variances may be submitted for a limited time or scope of effect or may be submitted as a permanent exemption from the accepted OSHA standard. The FAA must still provide effective interim mitigation and control measures to protect employees while the variance request is being evaluated. At a minimum, a variance request must include:

- (a) A description of the hazard or adverse condition being addressed
- (b) The applicable OSHA standard that cannot be complied with fully
- (c) A rationale for noncompliance
- (d) A detailed description of the proposed alternative action or control

measure

(3) Once a variance request is submitted, it must be reviewed by a Safety and Health Specialist. Review must take place at an appropriate organizational level to cover all employees and facilities proposed to be covered by the variance. If the Safety and Health Specialist and applicable management concur with the variance request, the DASHO then must review for final approval.

(4) Temporary or limited scope variances can be submitted, reviewed, and approved within the FAA. Permanent variance requests must be coordinated through the DASHO and submitted to the Department of Labor for final approval in accordance with [29 CFR § 1960.17](#).

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1960.17 Alternate standards](#).
- (2) [29 CFR § 1960.20 Alternate Standard for Fire Safety in Airport Traffic Control Towers](#).
- (3) 29 CFR § 1960.25 to 31 (Subpart D) Inspection and Abatement.
  - (a) [29 CFR § 1960.25 Qualifications of safety and health inspectors and agency inspections](#).
  - (b) [29 CFR § 1960.26 Conduct of inspections](#).
  - (c) [29 CFR § 1960.27 Representatives of officials in charge and representatives of employees](#).
  - (d) [29 CFR § 1960.28 Employee reports of unsafe or unhealthful working conditions](#).
  - (e) [29 CFR § 1960.29 Accident investigation](#).
  - (f) [29 CFR § 1960.30 Abatement of unsafe or unhealthful working conditions](#).
  - (g) [29 CFR § 1960.31 Inspections by OSHA](#).
- (4) 29 CFR § 1960.34 to 35 (Subpart E) GSA and Other Federal Agencies.
  - (a) [29 CFR § 1960.34 General provisions](#).
  - (b) [29 CFR § 1960.35 National Institute for Occupational Safety and Health](#).

## **2-6. Hazard Analysis Policy.**

**a. Scope.** This scope includes FAA policy for all FAA employees exposed to potential or existing personal safety and health hazards while performing assigned occupational duties. The FAA must evaluate occupational tasks and eliminate OSH hazards or implement hazard controls which will reduce risks to employees. The Hazard Analysis Policy focuses on the relationship between the employee, task, and occupational environment. The Hazard Analysis Policy requires the FAA to document hazards and the appropriate respective controls, including

the identification of appropriate PPE. The FAA must ensure employee workplaces are free of recognized hazards that may cause serious harm, and assess its workplaces to determine potential and existing occupational hazards which may require the use of PPE. The FAA must identify OSH hazards to which an employee may be exposed while performing work, including

- (1) Chemical;
- (2) Indoor air quality;
- (3) Physical (e.g., thermal stress environments with extreme heat or cold), and;
- (4) Biological health hazards (e.g., insects, animals, poisonous plants, pathogenic microorganisms, mold, and their associated toxins and biological disease transmitting vectors, and non-human animal waste).

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Prevention of injuries and illnesses through established safety and health requirements.
- (2) Identifying potential and existing occupational hazard(s) associated with occupational tasks, and/or equipment, assessing the risk associated with those hazards, eliminating the hazard(s), or identifying control measures to reduce their risk.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1960.8 Agency responsibilities.](#)
- (2) [29 CFR § 1960.28 Employee reports of unsafe or unhealthful working conditions.](#)
- (3) [29 CFR § 1910.94 Ventilation.](#)
  - (a) American National Standards Institute (ANSI) Z9.2-60 Fundamentals Governing the Design and Operation of Local Exhaust Systems.
  - (b) ANSI Z33.1-61 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying.
  - (c) ANSI Z33.1-66 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying.
  - (d) ANSI Z88.2-1969, Practices for Respiratory Protection.
  - (e) National Fire Protection Association (NFPA) 33-1969 Standard for Spray Finishing Using Flammable and Combustible Material.
  - (f) NFPA 68-1954 Guide for Explosion Venting.
- (4) [29 CFR § 1910.132 General Requirements.](#)
- (5) [29 CFR § 1910.1096 Ionizing radiation.](#)
  - (a) [10 CFR § 20 Appendix B Table I and Table II.](#)

(b) [10 CFR § 20 Appendix C](#).

**d. Additional FAA OSH Standards and Policy.** This policy is designed to meet the compliance requirements in the following:

(1) [EO 13058 Protecting Federal Employees and the Public from Exposure to Tobacco Smoke in the Federal Workplace](#).

(2) [GSA Policy and Procedure Public Building Service \(PBS P 5940.2\) Radon](#) {policy applicable to GSA-controlled space}.

## Chapter 3. Recording and Reporting Occupational Injuries and Illnesses

**3-1. Introduction.** This chapter establishes policy to employ mishap reporting and investigation processes to allow accurate tracking of FAA-wide mishap information and improve protection of employee's OSH while meeting regulatory requirements. The mishap reporting process collects data for each specific defined mishap. The FAA must use mishap data to identify hazards and risks, distinguish patterns of injuries and illnesses, advocate for employee OSH, and prevent future hazards. This chapter primarily addresses [29 CFR § 1904 Recording and Reporting Occupational Injuries and Illnesses](#) and [29 CFR § 1960 Basic Program Elements for Federal Employees OSH Programs and Related Matters](#).

### 3-2. Mishap Reporting and Investigation Policy.

**a. Scope.** This scope includes the requirements for recording, reporting, and investigating work-related fatalities, injuries, and illnesses for employees and contractors of all FAA organizations. These mishaps include all work-related fatalities, injuries, illnesses, motor vehicle incidents, property damage, first aid use, and employee near misses. The Frontline Managers/Supervisors must maintain recordkeeping and regulatory reporting and must complete all required forms for the reporting process including [FAA Form 3900-6, Mishap Report](#). The Frontline Manager/Supervisor must finalize the [FAA Form 3900-6](#) within seven-calendar days and update the form when new information is received within the five-year period following the incident. The [OSHA Form 300A, Summary of Work-Related Injuries and Illnesses](#), must be posted annually February 1 through April 30 of the year following the year covered by the records, in a prominent place in each establishment. Incidents occurring at remote unstaffed workplaces are included on the [OSHA Form 300A](#) maintained at the employee's duty station. A hardcopy of the completed [OSHA Form 300A](#) must be maintained onsite for a period of five-years following the end of the calendar year.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Establishing and implementing mishap reporting and investigation processes to meet regulatory requirements.
- (2) Providing a process to allow the FAA to compile comprehensive and accurate FAA-wide mishap information to track potential and existing occupational hazards with the goal to increase employee OSH protection.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1904 Recording and Reporting Occupational Injuries and Illnesses](#).
  - (a) [OSHA Form 300, Log of Work-Related Injuries and Illnesses](#).
  - (b) [OSHA Form 300A, Summary of Work-Related Injuries and Illnesses](#).
  - (c) [OSHA Form 301, Injury and Illness Incident Report](#).

- (2) [29 CFR § 1960.66 to 74 \(Subpart I\) Recordkeeping and Reporting Requirements.](#)
  - (a) [29 CFR § 1960.66 Purpose, scope and general provisions.](#)
  - (b) [29 CFR § 1960.67 Federal agency certification of the injury and illness annual summary \(OSHA 300–A or equivalent\).](#)
  - (c) [29 CFR § 1960.68 Prohibition against discrimination.](#)
  - (d) [29 CFR § 1960.69 Retention and updating of old forms.](#)
  - (e) [29 CFR § 1960.70 Reporting of serious accidents.](#)
  - (f) [29 CFR § 1960.71 Agency annual reports.](#)
  - (g) [29 CFR § 1960.72 Reporting Federal Agency Injury and Illness Information.](#)
  - (h) [29 CFR § 1960.73 Federal agency injury and illness recordkeeping forms.](#)
  - (i) [29 CFR § 1960.74 \[Reserved\]](#)
- (3) [42 USC § 201 The Health Insurance Portability and Accountability Act of 1996.](#)

**d. Additional FAA OSH Standards and Policy.** This policy is designed to meet the compliance requirements in the following:

- (1) [FAA Form 3900-6, Mishap Report.](#)
- (2) [Form CA-1, Federal Employee’s Notice of Traumatic Injury and Claim for Continuation of Pay / Compensation.](#)
- (3) [Form CA-2, Notice of Occupational Disease and Claim for Compensation.](#)
- (4) DOT Order 3910 Drug and Alcohol-Free Departmental Workplace Program

## Chapter 4. Fall Protection

**4-1. Introduction.** This chapter establishes policy for the performance of work on walking and working surfaces, on elevated working surfaces four or more feet above the next lower level (including work on all fixed ladders, platforms, and towers) and where fall hazards may exist within access points to elevated occupational areas. The Fall Protection Policy applies to FAA owned, leased, and maintained workplaces, structures, equipment, with identified existing or potential fall hazards. This chapter applies to selecting and using fall protection equipment, as well as designing or overseeing construction and renovation of workplaces with fall protection requirements. This policy also applies to those who are responsible for incorporating fall protection requirements into the projects, and Frontline Managers/Supervisors who assign work at heights and who are responsible for the execution of projects requiring the incorporation of fall protection requirements. In addition, this chapter includes policy for all FAA organizations and Employees for Slip, Trip, and Fall Hazards and Portable Ladders. This chapter primarily addresses [29 CFR § 1910 Subpart D Walking-Working Surfaces](#) and [29 CFR § 1910 Subpart F Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms](#). Construction standards within [29 CFR § 1926 Subpart L Scaffolds, Subpart M Fall Protection, Subpart R Steel Erection](#), and [Subpart X Stairways and Ladders](#) are included within the specific policy area.

### 4-2. Slip, Trip, and Fall Hazards Policy.

**a. Scope.** This scope includes, but is not limited to, all FAA employees in FAA workplaces working on all walking and working surfaces. The Slip, Trip, and Fall Hazards Policy requires the FAA to ensure the safety and health of employees exposed to occupational hazards and protects employees and FAA building occupants by identifying potential and existing occupational hazards and mitigating workplace slip, trip, and fall hazards.

**b. Objectives.** The primary objectives include the identification and prevention of slip, trip, and fall hazards.

- (1) Identifying common slip, trip, and fall hazards including:
  - (a) wet or contaminated floors (e.g., water, cleaning products, dust, debris);
  - (b) uneven indoor and outdoor walking surfaces (e.g., holes; broken or loose floor tiles; or torn or buckled carpet; loose or wrinkled mats or area rugs; non-compliant stairways;
  - (c) weather conditions (e.g., ice and snow buildup in parking lots, walkways, and sidewalks);
  - (d) obstructions (e.g., cords, cables, or accumulations of materials in walkways), and;
  - (e) poor visibility (e.g., caused by carrying large items obstructing one's view including inability to grasp stair handrails, insufficient lighting indoors and outdoors in work areas, walkways, and parking lots).
- (2) Ensuring Frontline Managers/Supervisors implement and administrate housekeeping safe and healthy work practices to eliminate or otherwise control slip, trip, and fall



hazards. These include evaluating and ensuring compliant design requirements to eliminate slip, trip, and fall hazards, as referenced in paragraph (1).

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) 29 CFR § 1910.21 to 30 (Subpart D) Walking-Working Surfaces.
  - (a) [29 CFR § 1910.21 Definitions.](#)
  - (d) [29 CFR § 1910.22 General requirements.](#)
  - (e) [29 CFR § 1910.23 Guarding floor and wall openings and holes.](#)
  - (f) [29 CFR § 1910.24 Fixed industrial stairs.](#)
  - (g) [29 CFR § 1910.25 Portable wood ladders.](#)
  - (h) [29 CFR § 1910.26 Portable metal ladders.](#)
  - (i) [29 CFR § 1910.27 Fixed ladders.](#)
    - (i) American Welding Standard (AWS) D1.0-1966 Code for Welding in Building Construction.
  - (j) [29 CFR § 1910.28 Safety requirements for scaffolding.](#)
  - (k) [29 CFR § 1910.29 Manually propelled mobile ladder stands and scaffolds \(towers\).](#)
  - (l) [29 CFR § 1910.30 Other working surfaces.](#)
    - (i) Commercial Standard, CS 202-56 (1961) "Industrial Lifts and Hinged Loading Ramps".
- (2) [29 CFR § 1926.56 Illumination.](#)
- (3) 29 CFR § 1926.1050 to 1053, 1060, and Subpart X Appendix A Ladders (Subpart X) Stairways and Ladders.
  - (a) [29 CFR § 1926.1050 Scope, application, and definitions applicable to this subpart.](#)
  - (b) [29 CFR § 1926.1051 General requirements.](#)
  - (c) [29 CFR § 1926.1052 Stairways.](#)
  - (d) [29 CFR § 1926.1053 Ladders.](#)
  - (e) [29 CFR § 1926.1060 Training requirements.](#)
  - (f) [29 CFR § 1926 Subpart X Appendix A Ladders.](#)
- (4) [GSA 2003 Facilities Standards \(P100\) 101308, Part 6.15 Lighting](#) (GSA lease building only).

#### 4-3. Fall Protection Policy.

**a. Scope.** The FAA must ensure FAA personnel are protected from potential and existing fall hazards on elevated work surfaces such as on towers, rooftops, and other elevated work platforms. This allows the FAA to identify potential and existing fall hazards and then eliminate the hazards or mitigate the risk. This scope includes, but is not limited to:

- (1) Employees assigned tasks at heights, (e.g., towers, rooftops, aircraft and other elevated work platforms).
- (2) Fall protection equipment, (e.g., fixed ladders, ladder safety systems, fall restraint and fall arrest equipment, anchorages and horizontal lifelines).
- (3) Inspections and maintenance of equipment.
- (4) Associated other fall hazards (e.g., aerial lifts, hatches, floor openings, guardrails, and parapets).
- (5) Procedures (e.g., incident investigations; emergency rescue, fall hazard surveys, and fall protection procedures).

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Preventing falls and fall-related injuries through established and implemented fall protection requirements.
- (2) Incorporating accepted engineering, PPE, and administrative controls allowing employees to anticipate, recognize, evaluate, and control fall-related safety and health concerns.
- (3) Ensuring applicable training and competency requirements and instituting specific fall protection controls to prevent or avoid fall related events.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) 29 CFR § 1910.21 to 30 (Subpart D) Walking-Working Surfaces.
  - (a) [29 CFR § 1910.21 Definitions.](#)
    - (i) ANSI A11.1-65 (R 70) Practice for Industrial Lighting.
  - (b) [29 CFR § 1910.22 General requirements.](#)
  - (c) [29 CFR § 1910.23 Guarding floor and wall openings and holes.](#)
  - (d) [29 CFR § 1910.24 Fixed industrial stairs.](#)
  - (e) [29 CFR § 1910.25 Portable wood ladders.](#)
    - (i) ANSI B31.1-67.
  - (f) [29 CFR § 1910.26 Portable metal ladders.](#)
  - (g) [29 CFR § 1910.27 Fixed ladders.](#)
    - (i) AWS D1.0-1966 Code for Welding in Building Construction.

- (h) [29 CFR § 1910.28 Safety requirements for scaffolding.](#)
- (i) [29 CFR § 1910.29 Manually propelled mobile ladder stands and scaffolds \(towers\).](#)
- (j) [29 CFR § 1910.30 Other working surfaces.](#)
  - (i) Commercial Standard, CS 202-56 (1961) “Industrial Lifts and Hinged Loading Ramps”.
- (2) 29 CFR § 1910.66 to 68 (Subpart F) Powered Platforms, Manlifts, and Vehicle-Mounted Work Platforms.
  - (a) [29 CFR § 1910.66 Powered platforms for building maintenance.](#)
  - (b) [29 CFR § 1910.66 Appendix C - Personal Fall Arrest System](#) (Section I - Mandatory).
  - (c) [29 CFR § 1910.66 Appendix D - Existing Installations \(Mandatory\).](#)
    - (i) ANSI A120.1-70 Safety Code for Powered Platforms for Exterior Building Maintenance.
  - (d) [29 CFR § 1910.67 Vehicle-mounted elevating and rotating work platforms.](#)
    - (i) ANSI A92.2-69 Standard for Vehicle Mounted Elevating and Rotating Work Platforms.
    - (ii) AWS B3.0-41 Standard Qualification Procedure.
    - (iii) AWS D8.4-61 Recommended Practices for Automotive Welding Design.
    - (iv) AWS D2.0-69 Specifications for Welding Highway and Railway Bridges.
    - (v) AWS D10.9-69 Standard Qualification of Welding Procedures and Welders for Piping and Tubing.
  - (e) [29 CFR § 1910.68 Manlifts.](#)
    - (i) ANSI A90.1-69 Safety Standard for Manlifts.
    - (ii) ANSI B15.1-53 (R 58) Safety Code for Mechanical Power Transmission Apparatus.
    - (iii) ANSI A14.3-56 Safety Code for Fixed Ladders.
- (3) [29 CFR § 1926 Subpart R Appendix G - 1926.502 \(b\)-\(e\) Fall Protection Systems Criteria and Practices.](#)
- (4) 29 CFR § 1926.450 to 454 (Subpart L) Scaffolds.
  - (a) [29 CFR § 1926.450 Scope, application and definitions applicable to this subpart.](#)
  - (b) [29 CFR § 1926.451 General requirements.](#)
  - (c) [29 CFR § 1926.452 Additional requirements applicable to specific types of scaffolds.](#)

- (d) [29 CFR § 1926.453 Aerial lifts.](#)  
 (i) ANSI A92.2-1969, Vehicle Mounted Elevating and Rotating Work Platforms.
- (e) [29 CFR § 1926.454 Training requirements.](#)
- (f) [29 CFR § 1926 Subpart L Appendix A - Scaffold Specifications.](#)  
 (i) ANSI A10.8-1988 Scaffolding-Safety Requirements.  
 (ii) National Forest Products Association (NFPA) National Design Specification for Wood Construction.
- (g) [29 CFR § 1926 Subpart L Appendix B - Criteria for Determining the Feasibility of Providing Safe Access and Fall Protection for Scaffold Erectors and Dismantlers.](#)
- (h) [29 CFR § 1926 Subpart L Appendix C - List of National Consensus Standards.](#)  
 (i) ANSI A92.2-69 Standard for Vehicle Mounted Elevating and Rotating Work Platforms.  
 (ii) ANSI A92.3-1990 Manually Propelled Elevating Aerial Platforms.  
 (iii) ANSI A92.5-1990 Boom Supported Elevating Work Platforms.  
 (iv) ANSI A92.6-1990 Self-Propelled Elevating Work Platforms.  
 (v) ANSI A92.7-1990 Airline Ground Support Vehicle-Mounted Vertical Lift Devices.  
 (vi) ANSI A92.8-1993 Vehicle-Mounted Bridge Inspection and Maintenance Devices  
 (vii) ANSI A92.9-1993 Mast-Climbing Work Platforms.
- (i) [29 CFR § 1926 Subpart L Appendix D - List of Training Topics for Scaffold Erectors and Dismantlers.](#)
- (j) [29 CFR § 1926 Subpart L Appendix E - Drawings and Illustrations.](#)
- (5) 29 CFR § 1926.500 to 503 (Subpart M) Fall Protection.  
 (a) [29 CFR § 1926.500 Scope, application, and definitions applicable to this subpart.](#)  
 (b) [29 CFR § 1926.501 Duty to have fall protection.](#)  
 (c) [29 CFR § 1926.502 Fall protection systems criteria and practices.](#)  
 (d) [29 CFR § 1926.503 Training requirements.](#)
- (6) 29 CFR § 1926.750 to 761 (Subpart R) Steel Erection.  
 (a) [29 CFR § 1926.750 Scope.](#)  
 (b) [29 CFR § 1926.751 Definitions.](#)  
 (c) [29 CFR § 1926.752 Site layout, site-specific erection plan and construction sequence.](#)  
 (d) [29 CFR § 1926.753 Hoisting and rigging.](#)

- (e) [29 CFR § 1926.754 Structural steel assembly.](#)
- (f) [29 CFR § 1926.755 Column anchorage.](#)
- (g) [29 CFR § 1926.756 Beams and columns.](#)
- (h) [29 CFR § 1926.757 Open web steel joists.](#)
- (i) [29 CFR § 1926.758 Systems-engineered metal buildings.](#)
- (j) [29 CFR § 1926.759 Falling object protection.](#)
- (k) [29 CFR § 1926.760 Fall protection.](#)
- (l) [29 CFR § 1926.761 Training.](#)

#### **4-4. Portable Ladders Policy.**

**a. Scope.** This scope includes, but is not limited to, providing guidance in the selection, care, and safe work practices of portable ladders.

**b. Objectives.** The primary objective of this policy is the prevention of portable ladder-related injuries through established and implemented safety and health requirements that incorporate the safe use, selection, inspection and maintenance of portable ladders.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1910.25 Portable Wood Ladders.](#)
- (2) [29 CFR § 1910.26 Portable Metal Ladders.](#)
  - (a) ANSI A14.2-56 Safety Code for Portable Metal Ladders, Supplemented by ANSI A14.2a-77.
- (3) 29 CFR § 1926.1050 to 1053, 1060, and Subpart X Appendix A Ladders (Subpart X) Stairways and Ladders.
  - (a) [29 CFR § 1926.1050 Scope, application, and definitions applicable to this subpart.](#)
  - (b) [29 CFR § 1926.1051 General requirements.](#)
  - (c) [29 CFR § 1926.1052 Stairways.](#)
  - (d) [29 CFR § 1926.1053 Ladders.](#)
  - (e) [29 CFR § 1926.1060 Training requirements.](#)
  - (f) [29 CFR § 1926 Subpart X Appendix A – Ladders.](#)

## Chapter 5. Means of Egress and Fire Protection and Life Safety

**5-1. Introduction.** The FAA Fire Protection and Life Safety (FLS) Policy specifies the requirements that collectively help to ensure the safety and health of employees from fires. This chapter primarily addresses [29 CFR § 1960](#) which further references [29 CFR § 1910 Subpart E Means of Egress](#) and [29 CFR § 1910 Subpart L Fire Protection](#).

### 5-2. FLS Policy.

**a. Scope.** This scope includes, but is not limited to, the requirements the FAA must provide to protect FAA employees from fire hazards.

**b. Objectives.** The primary objective of this policy is the establishment of fire protection and life safety policy driven by OSHA requirements.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1960.16 Compliance with OSHA standards.](#)
- (2) [29 CFR § 1910.33 to 39 \(Subpart E\) Means of Egress.](#)
  - (a) [29 CFR § 1910.33 Table of contents.](#)
  - (b) [29 CFR § 1910.34 Coverage and definitions.](#)
    - (i) International Fire Code (IFC)-2009, IFC, copyright 2009.
    - (ii) International Organization for Standardization (ISO) 13943:2000 (E/F), Fire Safety--Vocabulary, First Edition, April 15, 2000.
    - (iii) NFPA 101-2009, Life Safety Code.
  - (c) [29 CFR § 1910.35 Compliance with alternate exit-route codes.](#)
    - (i) IFC-2009, IFC, copyright 2009.
    - (ii) NFPA 101-1970 Code for Life Safety From Fire in Buildings and Structures.
    - (iii) NFPA 101-2009, Life Safety Code, 2009 edition.
  - (d) [29 CFR § 1910.36 Design and construction requirements for exit routes.](#)
    - (i) IFC-2009, IFC, copyright 2009.
    - (ii) NFPA 101-1970 Code for Life Safety From Fire in Buildings and Structures.
    - (iii) NFPA 101-2009, Life Safety Code, 2009 edition.
  - (e) [29 CFR § 1910.37 Maintenance, safeguards, and operational features for exit routes.](#)
    - (i) IFC-2009, IFC, copyright 2009.
    - (ii) NFPA 101-2009, Life Safety Code, 2009 edition.

- (f) [29 CFR § 1910.38 Emergency action plans.](#)
- (g) [29 CFR § 1910.39 Fire prevention plans.](#)
- (3) [29 CFR § 1910.155 to 165 \(Subpart L\) Fire Protection.](#)
  - (a) [29 CFR § 1910.155 Scope, application and definitions applicable to this subpart.](#)
  - (b) [29 CFR § 1910.156 Fire brigades.](#)
    - (i) ANSI Z88.5 American National Standard, Practice for Respirator Protection for the Fire Service.
    - (ii) Development of Criteria for Fire Fighters Gloves; Vol. II, Part II; Test Methods, 1976.
    - (iii) NFPA No. 1041, Fire Service Instructor Professional Qualifications.
    - (iv) NFPA No. 1971-1975 Protective Clothing for Structural Fire Fighting.
    - (v) NFPA No. 1972, Structural Fire Fighter's Helmets.
    - (vi) Publication "Model Performance Criteria for Structural Fire Fighters' Helmets".
  - (c) [29 CFR § 1910.157 Portable fire extinguishers.](#)
    - (i) NFPA No. 10, Portable Fire Extinguishers.
  - (d) [29 CFR § 1910.158 Standpipe and hose systems.](#)
    - (i) NFPA No. 13E, Fire Department Operations in Properties Protected by Sprinkler, Standpipe Systems.
    - (ii) NFPA No. 18, Wetting Agents.
    - (iii) NFPA No. 20, Centrifugal Fire Pumps.
    - (iv) NFPA No. 21, Steam Fire Pumps.
    - (v) NFPA No. 22, Water Tanks.
    - (vi) NFPA No. 24, Outside Protection.
    - (vii) NFPA No. 26, Supervision of Valves.
    - (viii) NFPA No. 194, Fire Hose Connections.
    - (ix) NFPA No. 197, Training for Initial Fire Attack.
    - (x) NFPA No. 1231, Water Supplies for Suburban and Rural Fire Fighting.
  - (e) [29 CFR § 1910.159 Automatic sprinkler systems.](#)
    - (i) NFPA No. 13, Sprinkler Systems.
    - (ii) NFPA No. 13A, Sprinkler Systems, Maintenance.
    - (iii) NFPA No. 18, Wetting Agents.
    - (iv) NFPA No. 20, Centrifugal Fire Pumps.
    - (v) NFPA No. 22, Water Tanks.
    - (vi) NFPA No. 24, Outside Protection.

- (vii) NFPA No. 26, Supervision of Valves.
- (viii) NFPA No. 72B, Auxiliary Protective Signaling Systems.
- (ix) NFPA No. 1231, Water Supplies for Suburban and Rural Fire

Fighting.

- (f) [29 CFR § 1910.160 Fixed extinguishing systems, general.](#)
  - (i) NFPA No. 11, Foam Systems.
  - (ii) NFPA No. 11A, High Expansion Foam Extinguishing Systems.
  - (iii) NFPA No. 11B, Synthetic Foam and Combined Agent Systems.
  - (iv) NFPA No. 12, Carbon Dioxide Systems.
  - (v) NFPA No. 12A, Halon 1301 Systems.
  - (vi) NFPA No. 12B, Halon 1211 Systems.
  - (vii) NFPA No. 15, Water Spray Fixed Systems.
  - (viii) NFPA No. 16, Foam-Water Spray Systems.
  - (ix) NFPA No. 17, Dry Chemical Systems.
  - (x) NFPA No. 69, Explosion Suppression Systems.
- (g) [29 CFR § 1910.161 Fixed extinguishing systems, dry chemical.](#)
  - (i) NFPA No. 11B, Synthetic Foam and Combined Agent Systems.
  - (ii) NFPA No. 17, Dry Chemical Systems.
- (h) [29 CFR § 1910.162 Fixed extinguishing systems, gaseous agent.](#)
  - (i) NFPA No. 12, Carbon Dioxide Systems.
  - (ii) NFPA No. 12A, Halon 1211 Systems.
  - (iii) NFPA No. 12B, Halon 1301 Systems.
  - (iv) NFPA No. 69, Explosion Suppression Systems.
- (i) [29 CFR § 1910.163 Fixed extinguishing systems, water spray and foam.](#)
  - (i) NFPA No. 11, Foam Extinguishing Systems.
  - (ii) NFPA No. 11A, High Expansion Foam Extinguishing Systems.
  - (iii) NFPA No. 11B, Synthetic Foam and Combined Agent Systems.
  - (iv) NFPA No. 15, Water Spray Fixed Systems.
  - (v) NFPA No. 16, Foam-Water Spray Systems.
  - (vi) NFPA No. 18, Wetting Agents.
  - (vii) NFPA No. 26, Supervision of Valves.
- (j) [29 CFR § 1910.164 Fire detection systems.](#)
  - (i) NFPA No. 71, Central Station Signaling Systems.
  - (ii) NFPA No. 72A, Local Protective Signaling Systems.
  - (iii) NFPA No. 72B, Auxiliary Protective Signaling Systems.
  - (iv) NFPA No. 72D, Proprietary Protective Signaling Systems.
  - (v) NFPA No. 72E, Automatic Fire Detectors.
  - (vi) NFPA No. 101, Life Safety Code.



- (k) [29 CFR § 1910.165 Employee alarm systems.](#)
  - (i) NFPA No. 71, Central Station Signaling Systems.
  - (ii) NFPA No. 72A, Local Protective Signaling Systems.
  - (iii) NFPA No. 72B, Auxiliary Protective Signaling Systems.
  - (iv) NFPA No. 72C, Remote Station Protective Signaling Systems.
  - (v) NFPA No. 72D, Proprietary Protective Signaling Systems.
  - (vi) NFPA No. 101, Life Safety Code.
- (l) [29 CFR § 1910 Subpart L Appendix A - Fire Protection.](#)
- (m) [29 CFR § 1910 Subpart L Appendix B - National Consensus Standards.](#)
  - (i) ANSI Z88.5 American National Standard, Practice for Respirator Protection for the Fire Service.
  - (ii) NFPA No. 10, Portable Fire Extinguishers.
  - (iii) NFPA No. 11, Foam Extinguishing Systems.
  - (iv) NFPA No. 11A, High Expansion Foam Extinguishing Systems.
  - (v) NFPA No. 11B, Synthetic Foam and Combined Agent Systems.
  - (vi) NFPA No. 12, Carbon Dioxide Systems.
  - (vii) NFPA No. 12A, Halon 1301 Systems.
  - (viii) NFPA No. 12B, Halon 1211 Systems.
  - (ix) NFPA No. 13, Sprinkler Systems.
  - (x) NFPA No. 13A, Sprinkler Systems, Maintenance.
  - (xi) NFPA No. 13E, Fire Department Operations in Properties Protected by Sprinkler, Standpipe Systems.
  - (xii) NFPA No. 15, Water Spray Fixed Systems.
  - (xiii) NFPA No. 16, Foam-Water Spray Systems.
  - (xiv) NFPA No. 17, Dry Chemical Systems.
  - (xv) NFPA No. 18, Wetting Agents.
  - (xvi) NFPA No. 20, Centrifugal Fire Pumps.
  - (xvii) NFPA No. 21, Steam Fire Pumps.
  - (xviii) NFPA No. 22, Water Tanks.
  - (xix) NFPA No. 24, Outside Protection.
  - (xx) NFPA No. 26, Supervision of Valves.
  - (xxi) NFPA No. 69, Explosion Suppression Systems.
  - (xxii) NFPA No. 71, Central Station Signaling Systems.
  - (xxiii) NFPA No. 72A, Local Protective Signaling Systems.
  - (xxiv) NFPA No. 72B, Auxiliary Protective Signaling Systems.
  - (xxv) NFPA No. 72C, Remote Station Protective Signaling Systems.
  - (xxvi) NFPA No. 72D, Proprietary Protective Signaling Systems.
  - (xxvii) NFPA No. 72E, Automatic Fire Detectors.

- Qualifications.
- Fire Fighting.
- Fighters.
- (xxviii) NFPA No. 101, Life Safety Code.
  - (xxix) NFPA No. 194, Fire Hose Connections.
  - (xxx) NFPA No. 197, Training for Initial Fire Attack.
  - (xxxi) NFPA No. 1041, Fire Service Instructor Professional
  - (xxxii) NFPA No. 1231, Water Supplies for Suburban and Rural
  - (xxxiii) NFPA No. 1971, Protective Clothing for Structural Fire
  - (xxxiv) NFPA No. 1972, Structural Fire Fighter's Helmets.
- (n) [29 CFR § 1910 Subpart L Appendix C - Fire Protection references for further information.](#)
- (o) [29 CFR § 1910 Subpart L Appendix D - Availability of publications IBR in section 1910.156 fire brigades.](#)
- (p) [29 CFR § 1910 Subpart L Appendix E - Test methods for protective clothing.](#)
- (q) [29 CFR § 1926.24 Fire Protection and Prevention.](#)
- (4) [29 CFR § 1960.17 Alternate Standards.](#)
- (5) [29 CFR § 1960.19 Other Federal agency standards affecting occupational safety and health.](#)
- (6) [41 CFR § 102-80 Safety and Environmental Management.](#)
- (7) [40 USC § 3312 Compliance with Nationally Recognized Codes.](#)
- (i) National Fire Protection Association 1, Fire Code, for accepted fire prevention practices in operating and managing buildings and workplaces.
  - (ii) International Code Council (ICC), Model Code Series accepted for construction or alteration of buildings.
  - (iii) The Administrator, also known as the Authority Having Jurisdiction, is permitted to invoke, at their discretion, the requirements of other codes not listed or applicable by reference, where special circumstances exist in which hazards are not adequately addressed.
- (1) [29 CFR § 1960.20 Alternate Standard for Fire Safety in Airport Traffic Control Towers.](#)
- (2) [29 CFR § 1960.29 Accident investigation.](#)
- (3) [29 CFR § 1960.34 General provisions.](#)
- (a) [Federal Fire Prevention and Control Act of 1974, P.L. 93-498.](#)

## Chapter 6. Motorized Vehicle Safety

**6-1. Introduction.** This chapter establishes policy for occupational duties involving the use of motorized vehicles during occupational activities. This chapter also addresses construction related activities regulated within [29 CFR § 1926 Subpart O Motor Vehicles, Mechanized Equipment, and Marine Operations](#).

### 6-2. Motor Vehicle Safety Policy.

**a. Scope.** This scope includes, but is not limited to, the reduction of or elimination of mishaps and resulting injuries with respect to the operation of on-road vehicles, off-road vehicles, water vessels, and aerial vehicles during official FAA business. The provisions of this section apply to all activities where FAA employees operate or are a passenger in a motorized vehicle during official duty including:

- (1) On-road vehicle (FAA-owned or leased, GSA-controlled Government-owned vehicle, privately owned vehicle or leased, or rental vehicle).
- (2) Off-road vehicles (four wheelers, snowcats, snowmobiles, all-terrain vehicles, or utility-terrain vehicles) and water vessels (boats, barges, or other water vessels).
- (3) Aerial vehicles (trams, helicopters, and aircraft).
- (4) This section does not include provisions for material-handling equipment (forklifts, scissor lifts, boom lifts, or cherry pickers) or heavy construction equipment (backhoes, tractors, or bulldozers). These are covered under Chapter 11, Section 11.2: Material Handling and Storage.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Prevention of motor vehicle-related injuries through established and implemented safety and health requirements.
- (2) Promoting safe and healthy motor vehicle operation.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1910.183 Helicopters](#).
- (2) [29 CFR § 1926.551 Helicopters](#).
- (3) [49 USC § 301 Motor Vehicle Safety](#).
- (4) [Federal Aviation Regulations \(FAR\) for Vehicle Operations](#).
- (5) [Executive Order 13043, Increasing Seat Belt Use in the U.S.](#)

**d. Additional FAA OSH Standards and Policy.** This policy is designed to meet the compliance requirements in the following:

- (1) DOT M 4440.3 (Motor Vehicle Management Policy).

- (2) [FAA Order 5200.10, Procedures for Conducting Investigations of Vehicle / Pedestrian Deviations.](#)
- (3) [Federal Management Regulation \(FMR\) 41 Code of Federal Regulations \(CFR\) 102-34 \(Motor Vehicle Management\).](#)
- (4) [Federal Motor Vehicle Safety Standard No. 208 Occupant Crash Protection.](#)
- (5) [Federal Motor Vehicle Safety Standard No. 206 Door Locks and Door Retention Components.](#)
- (6) [Federal Motor Vehicle Safety Standard No. 216 Roof Crush Resistance.](#)
- (7) [GSA Order 5800.1 ADM Smoking in GSA-occupied space and Government-owned or -leased vehicles assigned to GSA.](#)
- (8) [GSA Standard Form 91, Motor Vehicle Accident Report.](#)
- (9) ANSI/ American Society for Agricultural Engineers (ASAE) S279.17 Lighting and Marking of Agricultural Equipment on Highways.
- (10) [U.S. Coast Guard Regulations](#) and applicable state boating requirements.

## Chapter 7. Occupational Health and Environmental Controls

**7-1. Introduction.** This chapter establishes policy for employees having the potential to be exposed to hazardous occupational noise levels and radiation. The chapter includes policy for Hearing Conservation and Ionizing and Non-Ionizing Radiation. This chapter primarily addresses [29 CFR § 1910 Subpart G Occupational Health and Environmental Controls](#).

### 7-2. Hearing Conservation Policy.

**a. Scope.** This scope includes, but is not limited to, the protection of all FAA employees from hearing loss resulting from exposure to excessive occupational noise hazards. The FAA will identify at-risk employees whose occupational tasks, occupational environments, equipment, or vehicles present the potential for occupational exposure to hazardous noise over regulatory levels.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Prevention of hearing-related injuries through established and implemented safety and health requirements and by incorporating accepted engineering and administrative controls.
- (2) Administering an audiometric testing program for identified employees.
- (3) Providing hearing protection for identified employees when accepted engineering controls are not practical.
- (4) Administering effective training for identified employees and maintaining required recordkeeping.
- (5) Identify areas of high noise with appropriate signage.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1910.94 Ventilation](#).
  - (a) ANSI Z9.2-60 Fundamentals Governing the Design and Operation of Local Exhaust Systems.
  - (b) ANSI Z33.1-61 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying.
  - (c) ANSI Z33.1-66 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying.
  - (d) ANSI Z88.2-1969, Practices for Respiratory Protection.
  - (e) NFPA 33-1969 Standard for Spray Finishing Using Flammable and Combustible Material.
  - (f) NFPA 68-1954 Guide for Explosion Venting.

- (2) [29 CFR § 1910.95 Occupational noise exposure.](#)
  - (a) ANSI S3.6-69 Specifications for Audiometers.
- (3) [29 CFR § 1910.95 Appendix A - Noise exposure computation.](#)
- (4) [29 CFR § 1910.95 Appendix B - Methods for estimating the adequacy of hearing protector attenuation.](#)
  - (a) U.S. Department of Health, Education, and Welfare (HEW) Publication No. 76-120 (1975), List of Personal Hearing Protectors and Attenuation Data.
- (5) [29 CFR § 1910.95 Appendix C - Audiometric measuring instruments.](#)
- (6) [29 CFR § 1910.95 Appendix D - Audiometric test rooms.](#)
  - (a) ANSI S1.4-71 (R 76) Specification for Sound Level Meters.
  - (b) ANSI S1.11-71 (R 76) Specification for Octave, Half-Octave and Third-Octave Band Filter Sets.
  - (c) ANSI S3.6-69 Specifications for Audiometers.
- (7) [29 CFR § 1910.95 Appendix E - Acoustic calibration of audiometers.](#)
- (8) [29 CFR § 1910.95 Appendix H - Availability of referenced documents.](#)
- (9) [29 CFR § 1910.95 Appendix I - Definitions.](#)
  - (a) ANSI S1.4-71 (R 76) Specification for Sound Level Meters.
- (10) [29 CFR § 1926.52 Occupational noise exposure.](#)
- (11) [29 CFR § 1926.101 Hearing protection.](#)

**d. Additional FAA OSH Standards and Policy.** This policy is designed to meet the compliance requirements in the following [American Medical Association's Guides to the Evaluation of Permanent Impairment, 2009, 6<sup>th</sup> Edition](#) (for elimination of age-correction when determining a standard threshold shift). The reference removes the regulatory requirement within [29 CFR § 1910.95 Appendix G - Calculations and application of age corrections to audiograms.](#)

### **7-3. Ionizing and Non-Ionizing Radiation Safety Policy.**

**a. Scope.** This scope includes, but is not limited to, protecting all FAA employees from occupational exposure to ionizing and non-ionizing radiation in the workplace. The policy is intended to ensure safe and healthy working conditions by identifying potential radiation hazards and implementing control measures to minimize employee's exposures to radiation in accordance with applicable OSHA and industry standards. The scope does not include radon or commercial products and unintentional sources of workplace radiation (e.g., office computers and video display terminal units, cellular and satellite telephones, microwave ovens, and employee's security screening systems). Airborne radon is covered in Chapter 2, Section 2.6: Hazard Analysis.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Investigating potential radiation hazards.
- (2) Conducting radiation surveys to measure radiation levels in various occupational activities.
- (3) Ensuring all required signs are posted to identify potential and known radiation sources.
- (4) Developing and implement safe and healthy work practices based on documented levels of radiation in various occupational activities.
- (5) Providing training on radiation hazards and the control measures for minimizing radiation exposure.
- (6) If warranted by working conditions, providing equipment and training on the use of the equipment allowing employees to measure radiation and radiation exposure levels (e.g., meters and dosimeters).
- (7) Ensure the use of engineering controls and administrative controls to protect employees from radiation exposure are investigated and implemented.
- (8) If warranted by working conditions, providing FAA employees with the personal protective equipment necessary to protect them from radiation exposure.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational safety and health hazards:

- (1) [29 CFR § 1910.97 Nonionizing radiation.](#)
  - (a) ANSI Z535.1-2006 (R2011), Safety Colors, reaffirmed July 19, 2011.
  - (b) U.S. of America Standards Institute (USAS) Z53.1-1967 (also referred to as ANSI Z53.1-1967), Safety Color Code for Marking Physical Hazards, ANSI approved October 9, 1967.
- (2) [29 CFR § 1910.1096 Ionizing radiation.](#)
  - (a) [10 CFR § 20 Appendix B Table I and Table II.](#)
  - (b) [10 CFR § 20 Appendix C.](#)
- (3) [29 CFR § 1926.53 - Ionizing radiation.](#)
- (4) [29 CFR § 1926.54 - Nonionizing radiation.](#)

## Chapter 8. Hazardous Materials and Compressed Gas/Air Equipment

**8-1. Introduction.** This chapter establishes policy for employees having the potential for exposure to hazardous materials, compressed gasses, explosives, and hazards associated with the storage and handling of liquefied petroleum gasses. This chapter primarily addresses [29 CFR § 1910 Subpart H Hazardous Materials](#) and [29 CFR § 1910 Subpart M Compressed Gas and Compressed Air Equipment](#).

### 8-2. Hazardous Materials Policy.

**a. Scope.** The FAA must ensure the safety and health of an employee exposed to occupational hazards during hazardous materials activities. The FAA must ensure protection from potential and existing hazards from handling, transporting, or storing of hazardous materials. Each hazardous material has unique chemical and physical properties and requirements. The Hazardous Materials Policy requires the FAA to identify and eliminate or otherwise control hazards associated with these materials.

**b. Objectives.** The primary objectives include the following focus areas:

(1) Prevention of hazardous materials-related injuries through established and implemented safety and health requirements.

(2) Ensuring the safe and healthy storage, handling, and transfer of hazardous materials by incorporating accepted engineering and administrative controls (e.g., identified DOT and industry-approved handling and transfer processes), thereby allowing employees to anticipate, recognize, evaluate, and control hazardous materials-related safety and health concerns.

(3) Ensure employees are provided with the appropriate PPE.

(4) Provide employees appropriate training to manage, store, transport, and respond to hazardous material/waste incidents.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

(1) [29 CFR § 1910.1020 Toxic and Hazardous Substances, Registry of Toxic Effects of Chemical Substances, 1978.](#)

(2) 29 CFR § 1910.101 to 107, 109 to 111, 119 to 120, and 122 to 126 (Subpart H) Hazardous Materials.

(a) [29 CFR § 1910.101 Compressed gases \(general requirements\).](#)

(i) Compressed Gas Association (CGA) C-6 (1968) Standards for Visual Inspection of Compressed Gas Cylinders.

(ii) CGA C-8 (1962) Standard for Requalification of ICC-3HT Cylinders.

(iii) CGA P-1 (1965) Safe Handling of Compressed Gases.



(iv) CGA S-1.1 (1963) and 1965 Addenda, Safety Release Device Standards--Cylinders for Compressed Gases.

(v) CGA S-1.2 (1963) Safety Release Device Standards, Cargo and Portable Tanks for Compressed Gases.

(b) [29 CFR § 1910.102 Acetylene.](#)

(i) CGA G-1-2009 Acetylene, Twelfth Edition.

(ii) NFPA 51A (2001) Standard for Acetylene Cylinder Charging Plants.

(iii) NFPA 51A (2006) Standard for Acetylene Cylinder Charging Plants.

(c) [29 CFR § 1910.103 Hydrogen.](#)

(i) ANSI B31.1-67 Code for Pressure Piping and Addenda B31.1 (1969).

(ii) ANSI B31.1a-63 Addenda to ANSI B31.1 (1955).

(iii) ANSI B31.3-66 Petroleum Refinery Piping.

(iv) ANSI B31.5-66 Refrigeration Piping with Addenda B31.5a (1968).

(v) API 620, Fourth Ed. [1970] including Appendix R, Recommended Rules for Design and Construction of Large Welded Low Pressure Storage Tanks.

(vi) American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section VIII, 1968 Edition.

(vii) American Society for Testing and Materials (ASTM) D 1692-68, Test for Flammability of Plastic Sheeting and Cellular Plastics.

(viii) CGA S-1.1 (1963) and 1965 Addenda, Safety Release Device Standards--Cylinders for Compressed Gases.

(ix) CGA S-1.2 (1963) Safety Release Device Standards, Cargo and Portable Tanks for Compressed Gases.

(x) CGA S-1.3 (1959) Safety Release Device Standards-Compressed Gas Storage Containers.

(xi) NFPA 496-1967 Standard for Purged Enclosures for Electrical Equipment in Hazardous Locations.

(d) [29 CFR § 1910.104 Oxygen.](#)

(i) ASME Boiler and Pressure Vessel Code, Section VIII, 1968 Edition.

(ii) ASME Boiler and Pressure Vessel Code, Section VIII, Paragraph UG-84, 1968 Edition.

(iii) ANSI B31.1-67 and Addenda B31.1 (1969) Code for Pressure Piping.

(iv) CGA S-1.3 (1959) Safety Release Device Standards-Compressed Gas Storage Containers

(e) [29 CFR § 1910.105 Nitrous oxide.](#)

- (i) CGA G-8.1 (1964) Standard for the Installation of Nitrous Oxide Systems at Consumer Sites.
- (f) [29 CFR § 1910.106 Flammable liquids.](#)
  - (i) API 12B (May 1958) Specification for Bolted Production Tanks, 11th Edition, With Supplement No. 1, March 1962.
  - (ii) API 12D (August 1957) Specification for Large Welded Production Tanks, 7th Edition.
  - (iii) API 12F (March 1961) Specification for Small Welded Production Tanks, 5th Edition.
  - (iv) API 12F (March 1961) Specification for Small Welded Production Tanks, 5th Edition.
  - (v) API 620, Fourth Edition [1970] including Appendix R, Recommended Rules for Design and Construction of Large Welded Low Pressure Storage Tanks.
  - (vi) API 650 (1966) Welded Steel Tanks for Oil Storage, 3rd Edition.
  - (vii) API 2000 (1968) Venting Atmospheric and Low Pressure Storage Tanks.
  - (viii) ASME Boiler and Pressure Vessel Code, Section VIII, 1968 Edition.
  - (ix) ASTM D 5-65, Test for Penetration by Bituminous Materials.
  - (x) ASTM D 56-70, Test for Flash Point by Tag Closed Tester.
  - (xi) ASTM D 88-56, Test for Saybolt Viscosity.
  - (xii) ASTM D 93-71, Test for Flash Point by Pensky Martens.
  - (xiii) ASTM D 323-68, Standard Test Method of Test for Vapor Pressure of Petroleum Products (Reid Method).
  - (xiv) ASTM D 445-65, Test for Viscosity of Transparent and Opaque Liquids.
  - (xv) ASTM D 2161-66, Conversion Tables for SUS.
  - (xvi) NFPA 32-1970 Standard for Dry Cleaning Plants.
  - (xvii) NFPA 35-1970 Standard for the Manufacture of Organic Coatings.
  - (xviii) NFPA 36-1967 Standard for Solvent Extraction Plants.
  - (xix) NFPA 80-1968 Standard for Fire Doors and Windows.
  - (xx) NFPA 251-1969 Standard Methods of Fire Tests of Building Construction and Materials.
  - (xxi) NFPA 385-1966 Recommended Regulatory Standard for Tank Vehicles for Flammable and Combustible Liquids.
  - (xxii) Underwriters Laboratories (UL) 58-61 Steel Underground Tanks for Flammable and Combustible Liquids, 5th Edition.
  - (xxiii) UL 80-63 Steel Inside Tanks for Oil-Burner Fuel.

- (xxiv) UL 142-68 Steel Above Ground Tanks for Flammable and Combustible Liquids.
- (g) [29 CFR § 1910.107 Spray finishing using flammable and combustible materials.](#)
- (i) ASME Boiler and Pressure Vessel Code, Section VIII, 1968 Edition.
- (ii) NFPA 86A-1969 Standard for Oven and Furnaces Design, Location and Equipment.
- (iii) NFPA 91-1961 Standard for the Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying (ANSI Z33.1-61).
- (h) [29 CFR § 1910.109 Explosives and blasting agents.](#)
- (i) CGA P-3 (1963) Specifications, Properties, and Recommendations for Packaging, Transportation, Storage and Use of Ammonium Nitrate.
- (ii) Definition and Test Procedures for Ammonium Nitrate Fertilizer (November 1964).
- (iii) NFPA 78-1968 Lightning Protection Code.
- (iv) NFPA 203M-1970 Manual on Roof Coverings.
- (i) [29 CFR § 1910.110 Storage and handling of liquefied petroleum gases.](#)
- (i) ANSI H23.1-70 Seamless Copper Water Tube Specification.
- (ii) ANSI H38.7-69 Specification for Aluminum Alloy Seamless Pipe and Seamless Extruded Tube.
- (iii) ASME Boiler and Pressure Vessel Code, Section VIII, 1968 Edition and 1949, 1950, 1952, 1956, 1959, and 1962 Editions.
- (iv) ASME Code for Pressure Vessels, 1968 Edition.
- (v) ASTM A 53-69, Welded and Seamless Steel Pipe.
- (vi) ASTM B 88-69, Seamless Copper Water Tube.
- (vii) ASTM B 210-68, Aluminum-Alloy Drawn Seamless Tubes.
- (viii) ASTM B 241-69, Standard Specifications for Aluminum-Alloy Seamless Pipe and Seamless Extruded Tube.
- (ix) Code for Unfired Pressure Vessels for Petroleum Liquids and Gases of the API and the ASME, 1951 Edition.
- (x) NFPA 37-1970 Standard for the Installation and Use of Stationary Combustion Engines and Gas Turbines.
- (xi) NFPA 54-1969 Standard for the Installation of Gas Appliances and Gas Piping.
- (xii) NFPA 54A-1969 Standard for the Installation of Gas Piping and Gas Equipment on Industrial Premises and Certain Other Premises.
- (xiii) NFPA 58-1969 Standard for the Storage and Handling of Liquefied Petroleum Gases (ANSI Z106.1-1970).
- (xiv) NFPA 59-1968 Standard for the Storage and Handling of Liquefied Petroleum Gases at Utility Gas Plants.

(xv) NFPA 96-1970 Standard for the Installation of Equipment for the Removal of Smoke and Grease Laden Vapors from Commercial Cooking Equipment.

(xvi) NFPA 505-1969 Standard for Type Designations, Areas of Use, Maintenance, and Operation of Powered Industrial Trucks.

(j) [29 CFR § 1910.111 Storage and handling of anhydrous ammonia.](#)

(i) Agriculture Ammonia Institute-Rubber manufacturing Association (AAI-RMA) Specifications for Anhydrous Ammonia Hose.

(ii) API 620, Fourth Edition [1970] including Appendix R, Recommended Rules for Design and Construction of Large Welded Low Pressure Storage Tanks.

(iii) ANSI B31.5-66 Addenda B31.5a (1968) Refrigeration Piping.

(iv) ANSI K61.1-60 Safety Requirements for the Storage and Handling of Anhydrous Ammonia.

(v) ANSI K61.1-66 Safety Requirements for the Storage and Handling of Anhydrous Ammonia.

(vi) ASME Boiler and Pressure Vessel Code, Section VIII, 1968 Edition and 1949, 1950, 1952, 1956, 1959, and 1962 Editions.

(vii) ASTM A 47-68, Malleable Iron Castings.

(viii) ASTM A 53-69, Welded and Seamless Steel Pipe.

(ix) ASTM A 126-66, Gray Iron Casting for Valves, Flanges and Pipe Fitting.

(x) ASTM A 395-68, Ductile Iron for Use at Elevated Temperatures.

(xi) CGA S-1.3 (1959) Safety Release Device Standards-Compressed Gas Storage Containers.

(xii) Standard M-1 (1953, 1955, 1957, 1960, 1961, 1963, 1965, 1966, 1967, 1968), Superseded by ANSI K61.1-1972.

(k) [29 CFR § 1910.119 Process safety management of highly hazardous chemicals.](#)

(i) ASTM D 86-62, Test for Distillation of Petroleum Products.

(ii) [29 CFR § 1910.119 Appendix A - List of Highly Hazardous Chemicals, Toxics and Reactives \(Mandatory\).](#)

(l) [29 CFR § 1910.120 Hazardous waste operations and emergency response \(HAZWOPER\).](#)

(i) National Institute for Occupational Safety and Health ([NIOSH Recommendations for Occupational Safety and Health Standards](#)) (Sept. 1987).

(ii) Threshold Limit Values and Biological Exposure Indices for 1986-87 (1986).

(iii) [29 CFR § 1910.120 Appendix A - Personal protective equipment test methods.](#)

(iv) [29 CFR § 1910.120 Appendix B - General description and discussion of the levels of protection and protective gear.](#)

- (v) [29 CFR § 1910.120 Appendix C - Compliance guidelines.](#)
  - (vi) [29 CFR § 1910.120 Appendix D - References.](#)
- (3) [29 CFR § 1926.65 Hazardous Waste Operations and Emergency Response.](#)
- (a) [29 CFR § 1910.122 Table of contents.](#)
  - (b) [29 CFR § 1910.123 Dipping and coating operations: Coverage and definitions.](#)
  - (c) [29 CFR § 1910.124 General requirements for dipping and coating operations.](#)
    - (i) ACGIH's Industrial Ventilation: A Manual of Recommended Practice (22nd Edition, 1995).
    - (ii) ANSI Z9.1-71 Practices for Ventilation and Operation of Open-Surface Tanks.
    - (iii) ANSI Z9.2-79 Fundamentals Governing the Design and Operation of Local Exhaust Systems.
    - (iv) NFPA 34-1966 Standard for Dip Tanks Containing Flammable or Combustible Liquids.
    - (v) NFPA 34-1995 Standard for Dip Tanks Containing Flammable or Combustible Liquids.
  - (d) [29 CFR § 1910.125 Additional requirements for dipping and coating operations that use flammable liquids or liquids with flashpoints greater than 199.4° F \(93° C\).](#)
  - (e) [29 CFR § 1910.126 Additional requirements for special dipping and coating operations.](#)
- (4) [29 CFR § 1910.176 to 181 and 183 to 184 \(Subpart N\) Materials Handling and Storage.](#)
- (a) [29 CFR § 1910.176 Handling materials - general.](#)
  - (b) [29 CFR § 1910.177 Servicing multi-piece and single piece rim wheels.](#)
  - (c) [29 CFR § 1910.177 Appendix A - Trajectory.](#)
  - (d) [29 CFR § 1910.177 Appendix B - Ordering Information for the OSHA Charts.](#)
  - (e) [29 CFR § 1910.178 Powered industrial trucks.](#)
    - (i) ANSI B56.1-69 Safety Standard for Powered Industrial Trucks.
    - (ii) NFPA 30 (1969) Flammable and Combustible Liquids Code.
    - (iii) NFPA 58-1969 Standard for the Storage and Handling of Liquefied Petroleum Gases (ANSI Z106.1-1970).
  - (f) [29 CFR § 1910.178 Appendix A - Powered industrial trucks.](#)
  - (g) [29 CFR § 1910.179 Overhead and gantry cranes.](#)
    - (i) ANSI A14.3-56 Safety Code for Fixed Ladders.

Hoists.

(iii) Crane Manufacturer's Association of America (CMAA) Specification 1B61, Specifications for Electric Overhead Traveling Cranes.

(h) [29 CFR § 1910.180 Crawler locomotive and truck cranes.](#)

(i) ANSI B30.2.0-67 Safety Code for Overhead and Gantry Cranes.

(ii) Society of Automotive Engineers (SAE) 765 (1961) SAE Recommended Practice: Crane Loading Stability Test Code.

(i) [29 CFR § 1910.181 Derricks.](#)

(i) ANSI B30.6-69 Safety Code for Derricks.

(j) [29 CFR § 1910.184 Slings.](#)

(i) ASTM A 391-65 (ANSI G61.1-1968), Alloy Steel Chain.

(5) [29 CFR § 1926.65 Hazardous waste operations and emergency response.](#)

Disposal.

(6) 29 CFR § 1926.250 to 252 (Subpart H) Materials Handling, Storage, Use, and

(a) [29 CFR § 1926.250 General requirements for storage.](#)

(b) [29 CFR § 1926.251 Rigging equipment for material handling.](#)

(c) [29 CFR § 1926.252 Disposal of waste materials.](#)

(7) [49 CFR § 171-179 DOT Hazardous Materials Regulations.](#)

**d. Additional FAA OSH Standards and Policy.** This policy is designed to meet the compliance requirements in the following: [FAA Order 1050.14, Polychlorinated Biphenyls.](#)

### **8-3. Hazardous Substance Cleanup and Emergency Response/Recovery Policy.**

**a. Scope.** This scope includes, but is not limited to, employees involved in Hazardous Substance Cleanup and Emergency Response/Recovery activities. The FAA must ensure employees plan for and are protected from potential and existing occupational exposure to hazardous substances and environmental agents. OSHA utilizes the term Hazardous Waste Operations and Emergency Response (HAZWOPER) to indicate the following types of activities:

(1) Clean-up operations required by a governmental body, involving hazardous substances conducted at uncontrolled hazardous waste sites (including, but is not limited to, the Environmental Protection Agency (EPA)'s [National Priority Site List](#), workplaces recommended for the EPA National Priority Site List, state priority site lists, and initial investigations of government identified workplaces which are conducted before the presence or absence of hazardous substances has been ascertained).

(2) Corrective actions involving clean-up operations at workplaces covered by the [Resource Conservation and Recovery Act of 1976 \(RCRA\).](#)

(3) Voluntary clean-up operations at workplaces recognized by Federal, State, local, or other governmental bodies as uncontrolled hazardous waste workplaces.

(4) Operations involving hazardous waste activities at Treatment, Storage, and Disposal workplaces or by agencies under agreement with EPA to implement RCRA regulations.

(5) Emergency response operations for releases of, or substantial threats of releases of hazardous substances without regard to the hazard location.

**b. Objectives.** The primary objective of this policy is the prevention of hazardous substance-related injuries through established and implemented safety and health requirements that incorporate accepted hazard controls and training thereby allowing employees to anticipate, recognize, evaluate, and control hazardous substance-related exposures.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1910.120 Hazardous waste operations and emergency response \(HAZWOPER\)](#).
  - (a) [NIOSH Recommendations for Occupational Safety and Health Standards](#) (Sept. 1987).
  - (b) Threshold Limit Values and Biological Exposure Indices for 1986-87 (1986).
- (2) [29 CFR § 1910.120 Appendix A - Personal protective equipment test methods](#).
- (3) [29 CFR § 1910.120 Appendix B - General description and discussion of the levels of protection and protective gear](#).
- (4) [29 CFR § 1910.120 Appendix C - Compliance guidelines](#).
- (5) [29 CFR § 1910.120 Appendix D - References](#).
- (2) [29 CFR § 1926.65 Hazardous Waste Operations and Emergency Response](#).
- (3) [33 USC § 1251 – 1376 Federal Water Pollution Control Act](#) (Clean Water Act).
- (4) [40 CFR § 311 Worker Protection](#).
- (5) [42 USC § 85 The Clean Air Act](#).
- (6) [42 USC § 6901 et seq. Resource Conservation and Recovery Act of 1976 \(RCRA\)](#).
- (7) [42 USC §9601 et seq. Comprehensive Environmental Response, Compensation, and Liability Act \(CERCLA\)](#).
- (8) [Public Law 99–499 Superfund Amendments and Reauthorization Act \(SARA\)](#).

## Chapter 9. Personal Protective Equipment and Respiratory Protection

**9-1. Introduction.** This chapter establishes policy for occupational duties including the use of a respirator as well as any other PPE while performing FAA duties. This chapter primarily addresses [29 CFR § 1910 Subpart I Personal Protective Equipment](#). The PPE Policy includes, but is not limited to, providing protection for eyes, face, head, and extremities, via protective clothing, protective shields, and barriers. The Frontline Managers/Supervisors are required to provide and ensure PPE is maintained in a sanitary and reliable condition where it is necessary due to the hazards, processes, environment, or chemical hazards, airborne hazards, radiological hazards, or mechanical irritants encountered in a manner capable of causing injury or impairment in the function of any body part through absorption, inhalation, ingestion, or physical contact.

### 9-2. Respiratory Protection Policy.

**a. Scope.** This scope includes employees utilizing respirators. The policy includes, but is not limited to, minimizing occupational exposure to respiratory hazards (e.g., harmful dusts, fogs, fumes, mists, gases, smokes, sprays, and/or vapors). The Frontline Managers/Supervisors are required to provide respirators to an employee when such equipment is necessary to protect the employee's respiratory health and the applicable respirator must be suitable for the purpose intended. The FAA is responsible for the establishment and maintenance of a written respiratory protection program with required workplace-specific procedures and elements for required respirator use, as well as providing proper training for the employee. The program shall be updated as necessary to reflect those changes in workplace conditions that affect respirator use. Voluntary use of personal respirators brought by employees to workplaces is included in the scope of this policy, if the respirator meets the policy requirements unless the respirator is a disposable one-time use filtering facepiece unit. This section does not apply to pilot oxygen masks; these are covered by other applicable FAA regulations.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Prevention of respiratory-related injuries through established and implemented written respiratory protection requirements.
- (2) Ensuring the use of appropriate respirators are implemented when engineering controls are not feasible, or while they are being instituted, or where there are airborne concentrations of contaminants at unknown levels. Respirators will be used to prevent airborne exposure when there is no feasible alternative, often in an emergency, and only after written procedures are established and followed.
- (3) The FAA is responsible for the establishment and maintenance of a written respiratory protection program with workplace-specific procedures and elements for required respirator use, as well as providing medical monitoring, fit testing and proper training for the employee. In addition, employees must be determined to be medically fit to wear a respirator before issuance and exposure monitoring must be conducted to determine the appropriate level of respiratory protection required for protection against established permissible exposure limits of potential workplace contaminants.



(4) Recordkeeping of medical evaluations, fit testing, and the respirator program will be maintained in order to facilitate employee involvement in the respirator program, assist the employer in auditing the adequacy of the program, and provide a record for compliance determinations.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1910.134 Respiratory Protection.](#)
  - (a) ANSI Z88.2-1969, Practices for Respiratory Protection.
  - (b) CGA G-7.1 (1966) Commodity Specification.
  - (c) GSA Publication GG-B-0067b Air Compressed for Breathing Purposes, or Interim Federal Specifications, April 1965.
  - (d) U.S. Pharmacopeia {Compressed and liquid oxygen Medical Breathing Air}.
- (2) [29 CFR § 1910.134 Appendix A Fit Testing Procedures \(Mandatory\).](#)
- (3) [29 CFR § 1910.134 Appendix B 1 User Seal Check Procedures \(Mandatory\).](#)
- (4) [29 CFR § 1910.134 Appendix B 2 Respiratory Cleaning Procedures \(Mandatory\).](#)
- (5) [29 CFR § 1910.134 Appendix C OSHA Respirator Medical Evaluation Questionnaire \(Mandatory\).](#)
- (6) [29 CFR § 1910.134 Appendix D \(Mandatory\) Information for Employees Using Respirators When not Required Under Standard.](#)
- (7) [29 CFR § 1910.1000 to 1450 \(Subpart Z\) Toxic and Hazardous Substances.](#) (See Paragraph 15-4(c)(2) for specific Regulatory Requirements).
- (8) [29 CFR § 1910.1200 Hazard Communication.](#)
  - (a) ASTM D 56-05, Standard Test Method for Flash Point by Tag Closed Cup Tester, Approved May 1, 2005.
  - (b) ASTM D 86-07a, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, Approved April 1, 2007.
  - (c) ASTM D 93-08, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, Approved October 15, 2008.
  - (d) ASTM D 240-02 (Reapproved 2007), Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, Approved May 1, 2007.
  - (e) ASTM D 1078-05, Standard Test Method for Distillation Range of Volatile Organic Liquids, Approved May 15, 2005.
  - (f) ASTM D 3278-96 (Reapproved 2004) E1, Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus, Approved November 1, 2004.

(g) ASTM D 3828-07a, Standard Test Methods for Flash Point by Small Scale Closed Cup Tester, Approved July 15, 2007.

(h) ISO 10156:1996 (E), Gases and Gas Mixtures--Determination of Fire Potential and Oxidizing Ability for the Selection of Cylinder Valve Outlets, Second Edition, February 15, 1996.

(i) ISO 10156-2:2005 (E), Gas cylinders--Gases and Gas Mixtures--Part 2: Determination of Oxidizing Ability of Toxic and Corrosive Gases and Gas Mixtures, First Edition, August 1, 2005.

(j) ISO 13943:2000 (E/F), Fire Safety--Vocabulary, First Edition, April 15, 2000.

(k) NFPA 30B, Code for the Manufacture and Storage of Aerosol Products, 2007 Edition, Approved August 17, 2006.

(l) UN ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003.

(9) [29 CFR § 1910.1200 Appendix A - Health Hazard Criteria \(Mandatory\)](#).

(10) [29 CFR § 1910.1200 Appendix B - Physical Criteria \(Mandatory\)](#).

(11) [29 CFR § 1910.1200 Appendix C - Allocation Of Label Elements \(Mandatory\)](#).

(12) [29 CFR § 1910.1200 Appendix D - Safety Data Sheets \(Mandatory\)](#).

(13) [29 CFR § 1910.1200 Appendix E - Definition of "Trade Secret" \(Mandatory\)](#).

(14) UN ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003).

(15) [29 CFR § 1926.103 Respiratory Protection](#).

(16) [42 CFR § 84 Approval of Respiratory Protective Devices](#).

(17) Other IBR Items.

(a) ANSI K13.1-1973, American National Standard for Identification of Air-Purifying Respirator Canisters and Cartridges 84.113; 84.193; 84.1154.

(b) American Standards Association, Compressed Gas Cylinder Valve Outlet and Inlet Connections, B57.1-1965.

(c) Commodity Specification for Air, G-7.1, 1966 84.79, 84.141.

(d) MIL-STD-414, 11 June 1957, Including Change Notice 1, Sampling Procedures and Tables for Inspection by Variables for Percent Defective 84.41; 84.43.

### 9-3. PPE Policy.

**a. Scope.** This scope includes, but is not limited to, the selection, use, maintenance, and training, for PPE for purpose of eliminating or reducing exposures to hazards posed by occupational tasks. PPE must be provided at no cost to the employee when engineering and/or administrative controls are not adequate to reduce the risk(s) identified to below mandated

exposure limits in the workplace. This section addresses PPE requirements but does not address OSH subject-specific PPE. Refer to other policy-specific PPE requirements covered in the respective chapters or sections within this order (e.g., Respiratory Protection, Thermal Stress, Fall Protection, Electrical Safety, Hearing Conservation, Bloodborne Pathogens, and Hazardous Materials).

**b. Objectives.** The primary objectives include the following focus areas:

(1) Preventing injuries and illnesses through established safety and health PPE requirements.

(2) Implementing policy on the selection, use, maintenance, and training of appropriate PPE to protect employees from and reduce the exposure to those hazards to below mandated exposure limits or to provide a level of protection for a safe workplace.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

(1) 29 CFR § 1910.132 to 133 and 135 to 138 (Subpart I), PPE.

(a) [29 CFR § 1910.132 General requirements.](#)

(b) [29 CFR § 1910.133 Eye and face protection.](#)

(i) ANSI Z87.1-89, Practice for Occupational and Educational Eye and Face Protection.

(ii) ANSI Z87.1-1989, American National Standard Practice for Occupational and Educational Eye and Face Protection.

(iii) ANSI Z87.1-1989 (R-1998), American National Standard Practice for Occupational and Educational Eye and Face Protection.

(iv) ANSI Z87.1-2003, American National Standard Practice for Occupational and Educational Eye and Face Protection

(c) [29 CFR § 1910.135 Head protection.](#)

(i) ANSI Z89.1-1997, American National Standard for Personnel Protection--Protective Headwear for Industrial Workers—Requirements.

(ii) ANSI Z89.1-2003, American National Standard for Industrial Head Protection.

(iii) ANSI Z89.1-2009, American National Standard for Industrial Head Protection, approved January 26, 2009.

(d) [29 CFR § 1910.136 Foot protection.](#)

(i) ANSI Z41-1991 and 1999, American National Standard for Personal Protection -- Protective Footwear.

(ii) ANSI Z41.1-67 Men's Safety Toe Footwear.

(iii) ASTM F-2412-2005, Standard Test Methods for Foot Protection.

(iv) ASTM F-2413-2005, Standard Specification for Performance Requirements for Protective Footwear.

- (e) [29 CFR § 1910.137 Electrical Protective Equipment.](#)
- (f) [29 CFR § 1910.138 Hand protection.](#)
- (2) [29 CFR § 1926.28 Personal protective equipment.](#)
- (3) 29 CFR § 1926.95 to 97 and 100 to 107 (Subpart E) Personal Protective and Life Saving Equipment.
  - (a) [29 CFR § 1926.95 Criteria for personal protective equipment.](#)
  - (b) [29 CFR § 1926.96 Occupational foot protection.](#)
  - (c) [29 CFR § 1926.97 Electrical protective equipment.](#)
  - (d) [29 CFR § 1926.100 Head protection.](#)
    - (i) ANSI Z89.1-1997, American National Standard for Personnel Protection--Protective Headwear for Industrial Workers--Requirements.
    - (ii) ANSI Z89.1-2003, American National Standard for Industrial Head Protection.
    - (iii) ANSI Z89.1-2009, American National Standard for Industrial Head Protection, approved January 26, 2009.
  - (e) [29 CFR § 1926.101 Hearing protection.](#)
  - (f) [29 CFR § 1926.102 Eye and face protection.](#)
    - (i) ANSI Z87.1-1968, Practice for Occupational and Educational Eye and Face Protection.
  - (g) [29 CFR § 1926.103 Respiratory protection.](#)
  - (h) [29 CFR § 1926.104 Safety belts, lifelines, and lanyards.](#)
  - (i) QQ-P-416, Federal Specification Plating Cadmium (Electrodeposited).
    - (i) [29 CFR § 1926.105 Safety nets.](#)
    - (j) [29 CFR § 1926.106 Working over or near water.](#)
    - (k) [29 CFR § 1926.107 Definitions applicable to this subpart.](#)

## Chapter 10. General Environmental Controls

**10-1. Introduction.** This chapter establishes policy for general environmental controls including Confined Space (CS) Entry policy requirements, general environmental controls and the control of hazardous energy. CS Entry policy requirements include, but are not limited to, identifying confined spaces and confined space entry hazards and sets requirements for practices, procedures, and training to protect employees from the hazards of entry into permit-required confined spaces (e.g., hazardous atmosphere, potential for engulfment, entrapment hazard, or other hazard). General controls include sanitation, signage, and controlling hazardous energy. This chapter primarily addresses [29 CFR § 1910 Subpart J General Environmental Controls](#).

### 10-2. CS Entry Policy.

**a. Scope.** This scope includes the identification of confined spaces and their associated hazards in FAA workplaces and establishing practices and procedures for the performance of occupational activities required in confined spaces. The CS Entry Policy requires the development of procedures/permits, signage, monitoring of identified contaminants, and employee training for specific functions assigned under the Permit-Required Confined Space (PRCS).

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Identification of CSs and PRCSs through a CS Inventory Plan that clearly identifies and labels all applicable workplaces.
- (2) Prevention of CS-related injuries or deaths through established and implemented procedures, practices, and training to allow employees to anticipate, recognize, evaluate, and control CS-related OSH concerns.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1910.146 Permit-Required Confined Spaces](#).
- (2) [29 CFR § 1926 Subpart AA - Confined Spaces in Construction](#).
  - (a) [29 CFR § 1926.1200 - \[Reserved\]](#)
  - (b) [29 CFR § 1926.1201 - Scope](#).
  - (c) [29 CFR § 1926.1202 - Definitions](#).
  - (d) [29 CFR § 1926.1203 - General requirements](#).
  - (e) [29 CFR § 1926.1204 - Permit-required confined space program](#).
  - (f) [29 CFR § 1926.1205 - Permitting process](#).
  - (g) [29 CFR § 1926.1206 - Entry permit](#).
  - (h) [29 CFR § 1926.1207 - Training](#).

- (i) [29 CFR § 1926.1208 - Duties of authorized entrants.](#)
- (j) [29 CFR § 1926.1209 - Duties of attendants.](#)
- (k) [29 CFR § 1926.1210 - Duties of entry supervisors.](#)
- (l) [29 CFR § 1926.1211 - Rescue and emergency services.](#)
- (m) [29 CFR § 1926.1212 - Employee participation.](#)
- (n) [29 CFR § 1926.1213 - Provision of documents to Secretary.](#)

### **10-3. General Environmental Controls Policy.**

**a. Scope.** This scope includes general environmental controls associated with sanitation, temporary labor camps, and signage.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Ensuring adequate sanitation and hygiene facilities are available to ensure employee safety and health.
- (2) Ensuring adequate temporary labor camps are available when applicable to ensure employee safety and health.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR 1910.141 - Sanitation.](#)
- (2) [29 CFR 1910.142 - Temporary labor camps.](#)
  - (a) Publication No. 934 (1962), Food Service Sanitation Ordinance and Code, Part V of the Food Service Sanitation Manual.
- (3) [29 CFR 1910.143 - Nonwater carriage disposal systems. \[Reserved\]](#)
- (4) [29 CFR 1910.144 - Safety color code for marking physical hazards.](#)
- (5) [29 CFR 1910.145 - Specifications for accident prevention signs and tags.](#)
  - (a) ANSI Z535.1-2006 (R2011), Safety Colors, reaffirmed July 19, 2011.
  - (b) ASAE Emblem for Identifying Slow Moving Vehicles, ASAE S276.2 (1968).
  - (c) USAS Z53.1-1967 (also referred to as ANSI Z53.1-1967), Safety Color Code for Marking Physical Hazards, ANSI approved October 9, 1967.

### **10-4. Hazardous Energy Control Policy.**

**a. Scope.** This scope includes, but is not limited to ensuring FAA employees are protected from exposure to hazardous energies (Lockout/Tagout (LOTO)). Energy sources may include electrical, mechanical, hydraulic, pneumatic, chemical, thermal, or other sources identified in FAA workplaces.

**b. Objectives.** The primary objectives include the following focus areas:

(1) Preventing of hazardous energy-related injuries through established and implemented safety and health hazardous energy requirements.

(2) Ensuring before an FAA employee services, modifies, alters, or maintains a machine or equipment where the unexpected energizing, startup, or release of stored energy could occur and cause injury, procedures are developed and periodically inspected to all sources of energy are isolated and rendered inoperative through the use of a lockout device and proper labelling whenever the machinery or equipment is capable of being de-energized.

(3) If an energy-isolating device is not capable of being locked out, a tagout procedure must be utilized to provide full employee protection equivalent to a lockout procedure.

(4) Ensuring employees are trained according to their responsibilities under the workplace LOTO program.

(5) The FAA Hazardous Energy Control Policy requires all new equipment designed, procured, and installed, and any replacement or major repair, modification, alteration, or renovation to existing machines or equipment, be equipped with the capacity for LOTO.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards: [29 CFR § 1910.147 The Control of Hazardous Energy](#).

**d. Additional FAA OSH Standards and Policy.** This policy is designed to meet the compliance requirements in the following: [OSHA-listed Nationally Recognized Testing Laboratory \(NRTL\)](#) manufactured equipment.

## Chapter 11. Materials Handling and Storage

**11-1. Introduction.** This chapter establishes policy for the protection from potential and existing occupational hazards from handling materials by mechanical means using equipment such as Powered Industrial Trucks, (e.g., forklifts, scissor lifts, boom lifts, elevated work platforms, man lifts, basket cranes, or hydraladders); or heavy construction equipment (backhoes, tractors, or bulldozers); and cranes. The policy includes requirements for the maintenance and safe and healthy operation of material handling equipment and the safe and healthy storage of materials. OSHA regulations address specific material handling equipment that is not extensively used at most FAA workplaces (e.g., rim wheels, slings, elevators, and conveyors). This chapter primarily addresses [29 CFR § 1910 Subpart N Materials Handling and Storage](#).

### 11-2. Materials Handling and Storage (MHS) Policy.

**a. Scope.** This scope includes, but is not limited to, all MHS occupational activities at FAA workplaces or when providing authorized support of FAA organizations. Helicopter use is covered in Chapter 6, Section 6-2: Motor Vehicle Safety. Where those activities occur, the FAA employees should refer to the appropriate OSHA regulations for requirements.

**b. Objectives.** The primary objectives include the following focus areas:

(1) Prevention of injuries from material handling activities through established and implemented safety and health requirements by incorporating accepted engineering and administrative controls allowing employees to anticipate, recognize, evaluate, and control MHS-related safety and health concerns.

(2) Providing employees training on equipment, including maintenance, safe and healthy operation, and inspection requirements.

(3) Providing safe and healthy material storage requirements including fuel storage handling, elimination of hazards, clearance, and occupational area marking.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

(1) 29 CFR § 1910.176 to 182, 184 (Subpart N) Materials Handling and Storage.

(a) [29 CFR § 1910.176 Handling materials - general](#).

(b) [29 CFR § 1910.177 Servicing multi-piece and single piece rim wheels](#).

(c) [29 CFR § 1910.177 Appendix A - Trajectory](#).

(d) [29 CFR § 1910.177 Appendix B - Ordering Information for the OSHA](#)

[Charts](#).

(e) [29 CFR § 1910.178 Powered industrial trucks](#).

(i) ANSI B31.5-66 Addenda B31.5a (1968) Refrigeration Piping.

(ii) NFPA 30 (1969) Flammable and Combustible Liquids Code.



(iii) NFPA 58-1969 Standard for the Storage and Handling of Liquefied Petroleum Gases (ANSI Z106.1-1970).

(f) [29 CFR § 1910.178 Appendix A - Powered industrial trucks.](#)

(g) [29 CFR § 1910.179 Overhead and gantry cranes.](#)

(i) ANSI A14.2-56 Safety Code for Portable Metal Ladders, Supplemented by ANSI A14.2a-77.

(ii) ANSI B30.2-43 (R 52) Safety Code for Cranes, Derricks, and Hoists.

(iii) CMAA Specification 1B61, Specifications for Electric Overhead Traveling Cranes.

(h) [29 CFR § 1910.180 Crawler locomotive and truck cranes.](#)

(i) ANSI B30.2.0-67 Safety Code for Overhead and Gantry Cranes.

(ii) SAE 765 (1961) SAE Recommended Practice: Crane Loading

Stability Test Code.

(i) [29 CFR § 1910.181 Derricks.](#)

(i) ANSI B30.5-68 Safety Code for Crawler, Locomotive, and Truck Cranes.

(j) [29 CFR § 1910.184 Slings.](#)

(i) ASTM A 391-65 (ANSI G61.1-1968), Alloy Steel Chain.

(2) 29 CFR § 1926.250 to 252 (Subpart H) Materials Handling, Storage, Use, and Disposal.

(a) [29 CFR § 1926.250 General requirements for storage.](#)

(b) [29 CFR § 1926.251 Rigging equipment for material handling.](#)

(c) [29 CFR § 1926.252 Disposal of waste materials.](#)

(3) 29 CFR § 1926.600 to 606 (Subpart O) Motor Vehicles, Mechanized Equipment, and Marine Operations.

(a) [29 CFR § 1926.600 Equipment.](#)

(b) [29 CFR § 1926.601 Motor vehicles.](#)

(c) [29 CFR § 1926.602 Material handling equipment.](#)

(i) ANSI B56.1-1969, Safety Standards for Powered Industrial Trucks.

(ii) Power Crane and Shovel Association (PCSA) Standard No. 1, Mobile Crane and Excavator Standards, 1968.

(iii) PCSA Standard No. 2, Mobile Hydraulic Crane Standards, 1968 ("PCSA Std. No. 2 (1968)").

(iv) PCSA Standard No. 3, Mobile Hydraulic Excavator Standards, 1969.

(v) SAE 1970 Handbook.

(vi) SAE J166-1971, Trucks and Wagons.

- (vii) SAE J236-1971, Self-Propelled Graders.
- (viii) SAE J237-1971, Front End Loaders and Dozers.
- (ix) SAE J319b-1971, Self-Propelled Scrapers.
- (x) SAE J321a-1970, Fenders for Pneumatic-Tired Earthmoving Haulage Equipment.
- (xi) SAE J333a-1970, Operator Protection for Agricultural and Light Industrial Tractors.
- (xii) SAE J386-1969, Seat Belts for Construction Equipment.
- (d) [29 CFR § 1926.603 Pile driving equipment.](#)
  - (i) ASME Boiler and Pressure Vessel Code, Section VIII, 1968.
  - (ii) ASME Power Boilers, Section I, 1968.
- (e) [29 CFR § 1926.604 Site clearing.](#)
- (f) [29 CFR § 1926.605 Marine operations and equipment.](#)
- (g) [29 CFR § 1926.606 Definitions applicable to this subpart.](#)
- (4) [49 CFR § 171-179, DOT Hazardous Materials Regulations.](#)
- (5) [EO 13043, Increasing Seat Belt Use in the U.S.](#)

## Chapter 12. Machinery Use and Guarding, Hand and Portable Powered Tools, and Equipment Safety

**12-1. Introduction.** This chapter establishes policy for the requirements that must be met to protect employees, ensuring they are provided with safe and healthy compliant powered machinery, tools, and occupational environments, which employ properly functioning machine guards and other safety and health devices. This chapter primarily addresses [29 CFR 1910 Subpart O Machinery and Machine Guarding](#) and [29 CFR § 1910 Subpart P Hand and Portable Powered Tools and Other Hand-Held Equipment](#).

### 12-2. Machine Guarding and Hand Tool Safety Policy.

**a. Scope.** This scope includes, but is not limited to occupational activities with powered machinery and hand tools. The FAA must ensure the safety and health of employees exposed to occupational hazards during powered machinery and hand tool activities.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Prevention of machine and tool-related injuries through established and implemented safety and health requirements.
- (2) Ensuring industrial machinery and hand-operated power tools are selected and acquired from manufacturers listed by the OSHA-listed [NRTL](#) for the specific application for which they are to be used.
- (3) Ensuring all machinery and equipment, including hand and power tools are used, inspected, and maintained in accordance with manufacturers' instructions and recommendations. The FAA must keep copies of manufacturers' instructions and operator's manuals for all machines and powered tools used, and have these available for operating employees.
- (4) Ensuring employees only use the equipment and tools for the purpose for which they were designed.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1910.94 Ventilation](#).
  - (a) ANSI Z9.2-60 Fundamentals Governing the Design and Operation of Local Exhaust Systems.
  - (b) ANSI Z33.1-61 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying.
  - (c) ANSI Z33.1-66 Installation of Blower and Exhaust Systems for Dust, Stock, and Vapor Removal or Conveying.
  - (d) ANSI Z88.2-1969, Practices for Respiratory Protection.

(e) NFPA 33-1969 Standard for Spray Finishing Using Flammable and Combustible Material.

(f) NFPA 68-1954 Guide for Explosion Venting.

(2) 29 CFR § 1910.211 to 213 and 215 to 219 (Subpart O) Machinery and Machine Guarding.

(a) [29 CFR § 1910.211 Definitions.](#)

(b) [29 CFR § 1910.212 General requirements for all machines.](#)

(c) [29 CFR § 1910.213 Woodworking machinery requirements.](#)

(d) [29 CFR § 1910.215 Abrasive wheel machinery.](#)

Abrasive Wheels.

(i) ANSI B7.1-70 Safety Code for the Use, Care and Protection of

[industries.](#)

(e) [29 CFR § 1910.216 Mills and calenders in the rubber and plastics](#)

(f) [29 CFR § 1910.217 Mechanical power presses.](#)

(i) ASME Code for Pressure Vessels, 1968 Edition.

(g) [29 CFR § 1910.217 Appendix A - Mandatory requirements for certification/validation of safety systems for presence sensing device initiation of mechanical power presses.](#)

(h) [29 CFR § 1910.217 Appendix C - Mandatory requirements for OSHA recognition of third-party validation organizations for the PSDI standard.](#)

(i) [29 CFR § 1910.218 Forging machines.](#)

(i) ANSI B31.1a-63 Addenda to ANSI B31.1 (1955)

(ii) ANSI B7.1-70 Safety Code for the Use, Care and Protection of

Abrasive Wheels.

(iii) ANSI B20.1-57 Safety Code for Conveyors, Cableways, and

Related Equipment.

(j) [29 CFR § 1910.219 Mechanical power-transmission apparatus.](#)

(i) ANSI A11.1-65 (R 70) Practice for Industrial Lighting.

(3) 29 CFR § 1910.241 to 244 (Subpart P) Hand and Portable Powered Tools and Other Hand-Held Equipment.

(a) [29 CFR § 1910.241 Definitions.](#)

(b) [29 CFR § 1910.242 Hand and portable powered tools and equipment, general.](#)

(c) [29 CFR § 1910.243 Guarding of portable powered tools.](#)

(d) [29 CFR § 1910.244 Other portable tools and equipment.](#)

(4) [29 CFR § 1910.334 Use of equipment.](#)

- (5) 29 CFR § 1926.300 to 307 (Subpart I) Tools - Hand and Power.
- (a) [29 CFR § 1926.300 General requirements.](#)
    - (i) ANSI B15.1-1953 (R1958), Safety Code for Mechanical Power-Transmission Apparatus, revised 1958.
  - (b) [29 CFR § 1926.301 Hand tools.](#)
  - (c) [29 CFR § 1926.302 Power-operated hand tools.](#)
    - (i) ANSI A10.3-1970, Safety Requirements for Explosive-Actuated Fastening Tools.
  - (d) [29 CFR § 1926.303 Abrasive wheels and tools.](#)
    - (i) ANSI B7.1-1970, Safety Code for the Use, Care, and Protection of Abrasive Wheels.
  - (e) [29 CFR § 1926.304 Woodworking tools.](#)
    - (i) ANSI O1.1-1961, Safety Code for Woodworking Machinery.
  - (f) [29 CFR § 1926.305 Jacks-lever and ratchet, screw, and hydraulic.](#)
  - (g) [29 CFR § 1926.306 Air receivers.](#)
    - (i) ASME Boiler and Pressure Vessel Code, Section VIII, 1968.
  - (h) [29 CFR § 1926.307 Mechanical power-transmission apparatus.](#)

## Chapter 13. Welding, Cutting, and Brazing

**13-1. Introduction.** This chapter establishes policy for welding, cutting, and brazing operations performed at FAA workplaces or on FAA projects. This chapter primarily addresses [29 CFR § 1910 Subpart Q Welding, Cutting, and Brazing](#). Respiratory Protection regulatory requirements are found in Chapter 9 and air contaminants regulatory requirements in Chapter 15.

### 13-2. Welding, Cutting, and Brazing Policy.

**a. Scope.** This scope includes, but is not limited to, employees involved in welding, cutting, and brazing activities as well as associated and unassociated bystanders. The policy includes minimizing occupational exposure to welding, cutting, and brazing hazards and proactively preventing injury or damage resulting from fire by providing guidance on fire hazard guards, fire extinguishing equipment, fire watches, ventilation requirements, and other fire prevention methods.

**b. Objectives.** The primary objective of this policy is the prevention of welding, cutting, and brazing-related injuries and illnesses through established and implemented safety and healthy activities and controls.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

(1) 29 CFR § 1910.251 to 255 (Subpart Q) Welding, Cutting, and Brazing.

(a) [29 CFR § 1910.251 Definitions.](#)

(b) [29 CFR § 1910.252 General requirements.](#)

(i) API 1104 (1968) Standard for Welding Pipelines and Related Facilities.

(ii) API 2201 (1963) Welding or Hot Tapping on Equipment Containing Flammables.

(iii) ANSI Z54.1-63 Safety Standard for Non-Medical X-Ray and Sealed Gamma Ray Sources.

(iv) ANSI Z87.1-2003, American National Standard Practice for Occupational and Educational Eye and Face Protection.

(v) ASTM B 88-66A, Seamless Copper Water Tube.

(vi) NFPA 51B-1962 Standard for Fire Protection in Use of Cutting and Welding Processes.

(c) [29 CFR § 1910.253 Oxygen-fuel gas welding and cutting.](#)

(i) ANSI A13.1-56 Scheme for the Identification of Piping Systems.

(ii) ANSI B31.1-67 Power Piping.

(iii) ANSI B57.1-65 Compressed Gas Cylinder Valve Outlet and Inlet Connections.

- (iv) CGA 1957 Standard Hose Connection Standard.
- (v) CGA 1958 Regulator Connection Standard.
- (vi) CGA and Rubber Manufacturer's Association (RMA) Specification for Rubber Welding Hose (1958).
- (vii) NFPA 80-1970 Standard for the Installation of Fire Doors and Windows.
- (viii) NFPA 566-1965 Standard for the Installation of Bulk Oxygen Systems at Consumer Sites.
- (d) [29 CFR § 1910.254 Arc welding and cutting.](#)
  - (i) ANSI C33.2-56 Safety Standard for Transformer-Type Arc Welding Machines.
  - (ii) National Electrical Manufacturer's Association (NEMA) EW-1 (1962) Requirements for Electric Arc Welding Apparatus.
- (e) [29 CFR § 1910.255 Resistance welding.](#)
- (2) [29 CFR § 1910.1026 Chromium \(VI\).](#)
- (3) 29 CFR § 1926.350 to 354 (Subpart J) Welding and Cutting.
  - (a) [29 CFR § 1926.350 Gas welding and cutting.](#)
    - (i) ANSI Z49.1-1967, Safety in Welding and Cutting.
  - (b) [29 CFR § 1926.351 Arc welding and cutting.](#)
  - (c) [29 CFR § 1926.352 Fire prevention.](#)
  - (d) [29 CFR § 1926.353 Ventilation and protection in welding, cutting, and heating.](#)
  - (e) [29 CFR § 1926.354 Welding, cutting, and heating in way of preservative coatings.](#)
- (4) [29 CFR § 1926.1126 Chromium \(VI\).](#)
- (5) [49 CFR § 192.221-245 Subpart E, Welding of Steel in Pipelines.](#)

## Chapter 14. Electrical Safety

**14-1. Introduction.** This chapter establishes policy for occupational duties involving Electrical Safety. This chapter primarily addresses [29 CFR § 1910 Subpart R Special Industries](#) and [29 CFR § 1910 Subpart S Electrical](#).

### 14-2. Electrical Safety Policy.

**a. Scope.** This scope includes, but is not limited to, employees exposed to electrical hazards in the workplace, maintaining and servicing electrical equipment, and managing projects or supervising employees involved in electrical work. The Electrical Safety Policy requires the FAA to ensure the safety and health of employees exposed to electrical occupational hazards. The FAA must address electrical safety and health requirements for FAA workplaces and occupational activities including but not limited to the installation, operation, maintenance, and demolition of electric conductors, electric equipment, signaling and communications conductors and equipment, and raceways.

**b. Objectives.** The primary objective of this policy is to safeguard employees from electrical hazards in the workplace and prevent injuries from electric shock, arc flash and other electrically-related injuries through established safety and health requirements that incorporate accepted engineering and administrative controls including appropriate training for the electrical hazards identified in the workplace.

(1) **Equipment Manufacturer Selection.** The FAA must ensure electrical equipment intended for employee use, are selected, and acquired from manufacturers listed by an [OSHA-listed NRTL](#) for the specific application for which they are utilized. The NRTL label is evidence the equipment is suitable for the specific installation or use per the National Electrical Code.

(2) **General Equipment Maintenance and Operations Safety.** The FAA must ensure all machinery and equipment is used, inspected, and maintained in accordance with manufacturers' instructions and recommendations.

(3) **General Requirements for Electrical Equipment Installations and Working Spaces.** The FAA must ensure approved clearances are maintained in accordance with the National Electrical Code around electrical equipment to permit ready, safe, and healthy operation, and maintenance.

(4) **General Electrical Equipment Guarding Processes.** The FAA must ensure appropriate equipment-specific guarding requirements are maintained.

(5) **Equipment-Specific Safety and Guarding Requirements.** The FAA must ensure OSHA-compliant maintenance, operation, and guarding practices are maintained for machinery and equipment.

(6) **Specific Electrical Safety Policy-Related Controls.** FAA employees must follow safety and health-related work practices to prevent electric shock or other injuries resulting from intentional or unintentional electrical contact when work is performed on or near equipment or where circuits are or may become energized.



(7) PPE. The FAA must ensure FAA employees working in areas with potential electrical hazards use PPE appropriate for the work to be performed. PPE must be maintained, inspected, and tested as appropriate.

(8) Training. The FAA must ensure employees are trained in, and become familiar with, the safety and health-related work practices and requirements related to electrical hazards.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

(1) 29 CFR § 1910.301 to 308, 331-332, 334-335, 399 (Subpart S) Electrical.

(a) [29 CFR § 1910.301 Introduction.](#)

(b) [29 CFR § 1910.302 Electric utilization systems.](#)

(c) [29 CFR § 1910.303 General.](#)

(d) [29 CFR § 1910.304 Wiring design and protection.](#)

(e) [29 CFR § 1910.305 Wiring methods, components, and equipment for general use.](#)

(f) [29 CFR § 1910.306 Specific purpose equipment and installations.](#)

(g) [29 CFR § 1910.307 Hazardous \(classified\) locations.](#)

(h) [29 CFR § 1910.308 Special systems.](#)

(i) [29 CFR § 1910.331 Scope.](#)

(j) [29 CFR § 1910.332 Training.](#)

(k) [29 CFR § 1910.333 Selection and use of work practices.](#)

(l) [29 CFR § 1910.334 Use of equipment.](#)

(m) [29 CFR § 1910.335 Safeguards for personnel protection.](#)

(n) [29 CFR § 1910.399 Definitions applicable to this subpart.](#)

(o) [29 CFR § 1910 Subpart S Appendix A - Reference Documents.](#)

(2) 29 CFR § 1926.400, 402-408, 416-417, 431-432, 441-442, 449 (Subpart K)

Electrical.

(a) [29 CFR § 1926.400 Introduction.](#)

(b) [29 CFR § 1926.402 Applicability.](#)

(c) [29 CFR § 1926.403 General requirements.](#)

(d) [29 CFR § 1926.404 Wiring design and protection.](#)

(e) [29 CFR § 1926.405 Wiring methods, components, and equipment for general use.](#)

(f) [29 CFR § 1926.406 Specific purpose equipment and installations.](#)

- (g) [29 CFR § 1926.407 Hazardous \(classified\) locations.](#)
  - (h) [29 CFR § 1926.408 Special systems.](#)
  - (i) [29 CFR § 1926.416 General requirements.](#)
  - (j) [29 CFR § 1926.417 Lockout and tagging of circuits.](#)
  - (k) [29 CFR § 1926.431 Maintenance of equipment.](#)
  - (l) [29 CFR § 1926.432 Environmental deterioration of equipment.](#)
  - (m) [29 CFR § 1926.441 Batteries and battery charging.](#)
  - (n) [29 CFR § 1926.449 Definitions applicable to this subpart.](#)
- (3) 29 CFR § 1926.950 to 960 (Subpart V) Electric Power Transmission and Distribution.
- (a) [29 CFR § 1926.950 General.](#)
  - (b) [29 CFR § 1926.951 Medical services and first aid.](#)
  - (c) [29 CFR § 1926.952 Job briefing.](#)
  - (d) [29 CFR § 1926.953 Enclosed spaces.](#)
  - (e) [29 CFR § 1926.954 Personal protective equipment.](#)
  - (f) [29 CFR § 1926.955 Portable ladders and platforms.](#)
  - (g) [29 CFR § 1926.956 Hand and portable power equipment.](#)
  - (h) [29 CFR § 1926.957 Live-line tools.](#)
  - (i) [29 CFR § 1926.958 Materials handling and storage.](#)
  - (j) [29 CFR § 1926.959 Mechanical equipment.](#)
  - (k) [29 CFR § 1926.960 Working on or near exposed energized parts.](#)

## Chapter 15. Toxic and Hazardous Substances

**15-1. Introduction.** This chapter establishes policy within the following areas: Hazard Communication, Occupational Medical Surveillance, Occupational Exposure Assessments and Control, Bloodborne Pathogens Exposure Control, Asbestos Control, and Lead Exposure Control. This chapter primarily addresses [29 CFR § 1910 Subpart Z Toxic and Hazardous Substances](#).

### 15-2. Hazard Communication (HazCom) Policy.

**a. Scope.** This scope includes, but is not limited to employees involved in purchasing, receiving, using, and disposing of chemicals in the workplace. This section also addresses employees who do not use hazardous chemicals but may be directly or indirectly exposed to them during normal operations or in a foreseeable emergency (e.g., boiler maintenance). This section does not apply to FAA employees who work at non-FAA controlled workplaces (e.g., aircraft accident investigation, or aircraft certification inspection) however; those employees must comply with the specific non-FAA controlled workplace's HazCom Policy.

**b. Objectives.** The primary objectives include the following focus areas:

(1) The FAA must ensure a product containing one or more hazardous ingredients has been evaluated and approved for use before introduction into the workplace. The FAA must communicate the chemical hazard information to all potential persons directly or indirectly exposed; and this communication must include the methods of protection from the hazards and methods the FAA will use to eliminate or reduce the exposure. OSHA adopted the Globally Harmonized System (GHS) of Classification and Labeling of Chemicals to provide a standard approach of notifying employees of potential exposure to hazardous materials.

(2) Prevention of hazardous chemical exposure must occur through established and implemented safety and health notification and using engineering controls and administrative controls to prevent exposure to hazardous chemicals.

(3) Review each product's Safety Data Sheet (SDS) prior to acquisition to ensure acquired chemicals are evaluated for potential and existing occupational hazards.

(4) Ensure material containers are properly labeled in accordance with the OSHA Hazard Communication Standard and the product's SDS.

(5) Ensure SDSs are available at the workplace prior to a chemical's use. All chemicals used or stored in FAA workplaces must be identified for inclusion in an annually updated chemical inventory.

(6) Ensure bystander exposure to hazardous chemicals in FAA workplaces is reasonably and foreseeably identified and the potential for exposure and ways the potential for exposure may be eliminated or reduced is communicated to employees.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1910.1000 to 1450 \(Subpart Z\) Toxic and Hazardous Substances.](#)  
(See Paragraph 15-4(c)(2) for specific Regulatory Requirements).
- (2) [29 CFR § 1910.1200 Hazard Communication.](#)
  - (a) ASTM D 1078-05, Standard Test Method for Distillation Range of Volatile Organic Liquids, Approved May 15, 2005.
  - (b) ASTM D 240-02 (Reapproved 2007), Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, Approved May 1, 2007.
  - (c) ASTM D 3278-96 (Reapproved 2004) E1, Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus, Approved November 1, 2004.
  - (d) ASTM D 3828-07a, Standard Test Methods for Flash Point by Small Scale Closed Cup Tester, Approved July 15, 2007.
  - (e) ASTM D 56-05, Standard Test Method for Flash Point by Tag Closed Cup Tester, Approved May 1, 2005.
  - (f) ASTM D 86-07a, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, Approved April 1, 2007.
  - (g) ASTM D 93-08, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, Approved October 15, 2008.
  - (h) ISO 10156:1996 (E), Gases and Gas Mixtures--Determination of Fire Potential and Oxidizing Ability for the Selection of Cylinder Valve Outlets, Second Edition, February 15, 1996.
  - (i) ISO 10156-2:2005 (E), Gas cylinders--Gases and Gas Mixtures--Part 2: Determination of Oxidizing Ability of Toxic and Corrosive Gases and Gas Mixtures, First Edition, August 1, 2005.
  - (j) ISO 13943:2000 (E/F), Fire Safety--Vocabulary, First Edition, April 15, 2000.
  - (k) NFPA 30B, Code for the Manufacture and Storage of Aerosol Products, 2007 Edition, Approved August 17, 2006.
  - (l) United Nations (UN) ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003.
- (3) [29 CFR § 1910.1200 Appendix A - Health Hazard Criteria \(Mandatory\).](#)
- (4) [29 CFR § 1910.1200 Appendix B - Physical Criteria \(Mandatory\).](#)
  - (a) ASTM D 56-05, Standard Test Method for Flash Point by Tag Closed Cup Tester, Approved May 1, 2005.
  - (b) ASTM D 86-07a, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, Approved April 1, 2007.
  - (c) ASTM D 93-08, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, Approved October 15, 2008.

(d) ASTM D 240-02 (Reapproved 2007), Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, Approved May 1, 2007.

(e) ASTM D 1078-05, Standard Test Method for Distillation Range of Volatile Organic Liquids, Approved May 15, 2005.

(f) ASTM D 3278-96 (Reapproved 2004) E1, Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus, Approved November 1, 2004.

(g) ASTM D 3828-07a, Standard Test Methods for Flash Point by Small Scale Closed Cup Tester, Approved July 15, 2007.

(h) ISO 10156:1996 (E), Gases and Gas Mixtures--Determination of Fire Potential and Oxidizing Ability for the Selection of Cylinder Valve Outlets, Second Edition, February 15, 1996.

(i) ISO 10156-2:2005 (E), Gas cylinders--Gases and Gas Mixtures--Part 2: Determination of Oxidizing Ability of Toxic and Corrosive Gases and Gas Mixtures, First Edition, August 1, 2005.

(j) ISO 13943:2000 (E/F), Fire Safety--Vocabulary, First Edition, April, 15, 2000.

(k) NFPA 30B, Code for the Manufacture and Storage of Aerosol Products, 2007 Edition, Approved August 17, 2006.

(l) UN ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003.

(5) [29 CFR § 1910.1200 Appendix C - Allocation Of Label Elements \(Mandatory\)](#).

(6) [29 CFR § 1910.1200 Appendix D - Safety Data Sheets \(Mandatory\)](#).

(7) [29 CFR § 1910.1200 Appendix E - Definition of "Trade Secret" \(Mandatory\)](#).

(a) UN ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003.

(8) [29 CFR § 1926.59 Hazard Communication](#).

### **15-3. Occupational Medical Surveillance and Recordkeeping Policy.**

**a. Scope.** This scope includes, but is not limited to, the safeguarding of employees' health by providing Occupational Medical Surveillance and Recordkeeping services to identified employees and the documentation of these services. The scope does not include Occupational Medical Surveillance and Recordkeeping related to medical clearance of air traffic controllers, required pilot's medical examination certification, FAA clinical (first aid) services, or FAA's Drug and Alcohol Prevention Policy.

**b. Objectives.** The primary objectives of this section includes the following focus areas:

(1) Prevention of occupational exposure to health hazards through established and implemented requirements (e.g., vaccinations and other prophylactic services).

(2) Providing administrative controls allowing employees to anticipate, recognize, evaluate, and control occupational health hazards.

(3) Providing Occupational Medical Surveillance and Recordkeeping services to identified employees.

(4) Maintaining recordkeeping and ensuring all FAA employees are provided access to their Occupational Medical Surveillance records.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [5 CFR § 293 Subpart E, Employee Medical File System Records.](#)
- (2) [29 CFR § 1904 Recording and Reporting Occupational Injuries and Illnesses.](#)
- (3) [29 CFR § 1926.59 Hazard Communication.](#)

**d. Additional FAA OSH Standards and Policy.** This policy is designed to meet the compliance requirements in the following: [FAA Order 1350.14, Records Management.](#)

#### **15-4. Occupational Exposure Assessments and Control (Occ Exp) Policy.**

**a. Scope.** This scope includes, but is not limited to, the assessment of occupational exposure, including emergency response exposures, where the presence or use of environmental agents may produce harmful and hazardous exposures to employees to hazards. Occ Exp assessment is the process of researching, measuring, and defining chemical, physical, and biological exposure profiles and hazards. Assessments can include quantitative and qualitative assessments.

(1) This section addresses hazards including those associated with exposure to liquids, solids, gases, vapors, particulates, and mists.

(2) This section also addresses Occ Exp to laboratory hazardous chemicals.

(3) This policy is implemented and aligned with Chapter 2, Section 2.6: Hazard Analysis Policy, which is responsible for determining the Occ Exp to toxic and hazardous substances, mixtures, and other environmental agents entering the body through inhalation, absorption, ingestion, and injection (commonly termed the four "routes of exposure").

**b. Objectives.** The primary objectives include the following focus areas:

(1) Prevention of Occ Exp to toxic and hazardous materials through established and implemented assessment requirements.

(2) Providing processes and procedures to ensure the evaluation and protection of FAA employees from exposure to hazards in FAA workplaces, laboratories, and those encountered responding to emergencies.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [29 CFR § 1904 Recording and Reporting Occupational Injuries and Illnesses.](#)
- (2) [29 CFR § 1910.1000 to 1450 \(Subpart Z\) Toxic and Hazardous Substances.](#)

- (a) [29 CFR § 1910.1000 Air contaminants.](#)
  - (i) [29 CFR § 1910.1000 TABLE Z-1 - TABLE Z-1 Limits for Air Contaminants.](#)
  - (ii) [29 CFR § 1910.1000 TABLE Z-2 - TABLE Z-2.](#)
  - (iii) [29 CFR § 1910.1000 TABLE Z-3 - TABLE Z-3 Mineral Dusts.](#)

Contaminants.

- (b) [29 CFR § 1910.1001 Asbestos.](#)
- (c) [29 CFR § 1910.1001 Appendix A - OSHA Reference Method –](#)

Mandatory.

- (i) [OSHA Method ID-160 \(most current version\).](#)
- (ii) [NIOSH Method 7400 \(most current version\).](#)
- (d) [29 CFR § 1910.1001 Appendix C - Qualitative and quantitative fit testing procedures – Mandatory.](#)

testing procedures – Mandatory.

- (e) [29 CFR § 1910.1001 Appendix D - Medical questionnaires –](#)

Mandatory.

- (f) [29 CFR § 1910.1001 Appendix E - Interpretation and classification of chest roentgenograms – Mandatory.](#)

chest roentgenograms – Mandatory.

- (g) [29 CFR § 1910.1001 Appendix F - Work practices and engineering controls for automotive brake and clutch inspection, disassembly, repair and assembly –](#)

Mandatory.

- (h) [29 CFR § 1910.1002 Coal tar pitch volatiles; interpretation of term.](#)
- (i) [29 CFR § 1910.1003 13 Carcinogens \(4-Nitrobiphenyl, etc.\)](#)
- (j) [29 CFR § 1910.1004 alpha-Naphthylamine.](#)
- (k) [29 CFR § 1910.1006 Methyl chloromethyl ether.](#)
- (l) [29 CFR § 1910.1007 3,4-Dichlorobenzidine \(and its salts\).](#)
- (m) [29 CFR § 1910.1008 bis-Chloromethyl ether.](#)
- (n) [29 CFR § 1910.1009 beta-Naphthylamine.](#)
- (o) [29 CFR § 1910.1010 Benzidine.](#)
- (p) [29 CFR § 1910.1011 4-Aminodiphenyl.](#)
- (q) [29 CFR § 1910.1012 Ethyleneimine.](#)
- (r) [29 CFR § 1910.1013 beta-Propiolactone.](#)
- (s) [29 CFR § 1910.1014 2-Acetylaminofluorene.](#)
- (t) [29 CFR § 1910.1015 4-Dimethylaminoazobenzene.](#)
- (u) [29 CFR § 1910.1016 N-Nitrosodimethylamine.](#)

- (v) [29 CFR § 1910.1017 Vinyl chloride.](#)
  - (i) [29 CFR § 1910.1017 Appendix A - Supplemental medical information.](#)
- (w) [29 CFR § 1910.1018 Inorganic arsenic.](#)
  - (i) [29 CFR § 1910.1018 Appendix A - Inorganic arsenic substance information sheet.](#)
  - (ii) [29 CFR § 1910.1018 Appendix B - Substance technical guidelines.](#)
  - (iii) [29 CFR § 1910.1018 Appendix C - Medical surveillance guidelines.](#)
- (x) [29 CFR § 1910.1020 Access to employee exposure and medical records.](#)
- (y) [29 CFR § 1910.1025 Lead.](#)
  - (i) [29 CFR § 1910.1025 Appendix A - Substance data sheet for occupational exposure to lead.](#)
  - (ii) [29 CFR § 1910.1025 Appendix B - Employee standard summary.](#)
  - (iii) [29 CFR § 1910.1025 Appendix C - Medical surveillance guidelines.](#)
  - (iv) [29 CFR § 1910.1025 Appendix D - Qualitative fit test protocols.](#)
- (z) [29 CFR § 1910.1026 Chromium \(VI\).](#)
  - (i) [29 CFR § 1910.1026 Appendix A - Chromium \(VI\)](#)
- (aa) [29 CFR § 1910.1027 Cadmium.](#)
  - (i) [29 CFR § 1910.1027 Appendix A - Substance Safety Data Sheet – Cadmium.](#)
  - (ii) [29 CFR § 1910.1027 Appendix B - Substances Technical Guidelines for Cadmium.](#)
  - (iii) [29 CFR § 1910.1027 Appendix C - Qualitative and Quantitative Fit Testing Procedures.](#)
  - (iv) [29 CFR § 1910.1027 Appendix D - Occupational Health History Interview With Reference to Cadmium Exposure.](#)
  - (v) [29 CFR § 1910.1027 Appendix E - Cadmium in Workplace Atmospheres.](#)
- (bb) [29 CFR § 1910.1028 Benzene.](#)
  - (i) [29 CFR § 1910.1028 Appendix A - Substance safety data sheet, Benzene.](#)
  - (ii) [29 CFR § 1910.1028 Appendix B - Substance technical guidelines, Benzene.](#)
  - (iii) [29 CFR § 1910.1028 Appendix C - Medical surveillance guidelines for Benzene.](#)
  - (iv) [29 CFR § 1910.1028 Appendix D - Sampling and analytical methods for Benzene monitoring and measurement procedures.](#)
  - (v) [29 CFR § 1910.1028 Appendix E - Qualitative and Quantitative fit testing procedures.](#)



- (cc) [29 CFR § 1910.1029 Coke oven emissions.](#)
  - (i) [29 CFR § 1910.1029 Appendix A - Coke oven emissions substance information sheet.](#)
  - (ii) [29 CFR § 1910.1029 Appendix B - Industrial hygiene and medical surveillance guidelines.](#)
- (dd) [29 CFR § 1910.1030 Bloodborne pathogens.](#)
  - (i) [29 CFR § 1910.1030 Appendix A - Hepatitis B Vaccine Declination \(Mandatory\).](#)
- (ee) [29 CFR § 1910.1043 Cotton dust.](#)
  - (i) [29 CFR § 1910.1043 Appendix A - Air sampling and analytical procedures for determining concentrations of cotton dust.](#)
  - (ii) [29 CFR § 1910.1043 Appendix B-I - Respiratory questionnaire.](#)
  - (iii) [29 CFR § 1910.1043 Appendix B-III - Abbreviated respiratory questionnaire.](#)
  - (iv) [29 CFR § 1910.1043 Appendix C - Spirometry prediction tables for normal males and females.](#)
  - (v) [29 CFR § 1910.1043 Appendix D - Pulmonary function standards for cotton dust standard.](#)
  - (vi) [29 CFR § 1910.1043 Appendix E - Vertical elutriator equivalency protocol.](#)
- (ff) [29 CFR § 1910.1044 1,2-dibromo-3-chloropropane.](#)
  - (i) [29 CFR § 1910.1044 Appendix A - Substance safety data sheet for DBCP.](#)
  - (ii) [29 CFR § 1910.1044 Appendix B - Substance technical guidelines for DBCP.](#)
  - (iii) [29 CFR § 1910.1044 Appendix C - Medical surveillance guidelines for DBCP.](#)
- (gg) [29 CFR § 1910.1045 Acrylonitrile.](#)
  - (i) [29 CFR § 1910.1045 Appendix A - Substance safety data sheet for acrylonitrile.](#)
  - (ii) [29 CFR § 1910.1045 Appendix B - Substance technical guidelines for acrylonitrile.](#)
  - (iii) [29 CFR § 1910.1045 Appendix C - Medical surveillance guidelines for acrylonitrile.](#)
  - (iv) [29 CFR § 1910.1045 Appendix D - Sampling and analytical methods for acrylonitrile.](#)
- (hh) [29 CFR § 1910.1047 Ethylene oxide.](#)
  - (ii) [29 CFR § 1910.1048 Formaldehyde.](#)
    - (i) [29 CFR § 1910.1048 Appendix A - Substance technical guidelines for formalin.](#)

- (ii) [29 CFR § 1910.1048 Appendix B - Sampling strategy and analytical methods for formaldehyde.](#)
- (iii) [29 CFR § 1910.1048 Appendix C - Medical surveillance – Formaldehyde.](#)
- (iv) [29 CFR § 1910.1048 Appendix E - Qualitative and quantitative fit testing procedures.](#)
- (jj) [29 CFR § 1910.1050 Methylene dianiline.](#)
  - (i) [29 CFR § 1910.1050 Appendix A - Substance Data Sheet, for 4,4' - Methylene dianiline.](#)
  - (ii) [29 CFR § 1910.1050 Appendix B - Substance Technical Guidelines, MDA.](#)
  - (iii) [29 CFR § 1910.1050 Appendix C - Medical Surveillance Guidelines for MDA.](#)
  - (iv) [29 CFR § 1910.1050 Appendix D - Sampling and Analytical Methods for MDA Monitoring and Measurement Procedures.](#)
  - (v) [29 CFR § 1910.1050 Appendix E - Qualitative and Quantitative Fit Testing Procedures.](#)
- (kk) [29 CFR § 1910.1051 1,3-Butadiene.](#)
  - (i) [29 CFR § 1910.1051 Appendix E - Respirator Fit Testing Procedures \(Mandatory\).](#)
- (ll) [29 CFR § 1910.1052 Methylene Chloride.](#)
  - (i) [29 CFR § 1910.1052 Appendix A - Substance Safety Data Sheet and Technical Guidelines for Methylene Chloride.](#)
  - (ii) [29 CFR § 1910.1052 Appendix B - Medical Surveillance for Methylene Chloride.](#)
  - (iii) [29 CFR § 1910.1052 Appendix C - Questions and Answers - Methylene Chloride Control in Furniture Stripping.](#)
- (mm) [29 CFR § 1910.1096 Ionizing radiation.](#)
  - (i) [10 CFR § 20 Appendix B Table I and Table II.](#)
  - (ii) [10 CFR § 20 Appendix C.](#)
- (nn) [29 CFR § 1910.1200 Hazard Communication.](#)
- (oo) [29 CFR § 1910.1200 Appendix A - Health Hazard Criteria \(Mandatory\).](#)
- (pp) [29 CFR § 1910.1200 Appendix B - Physical Criteria \(Mandatory\).](#)
  - (i) ASTM D 56-05, Standard Test Method for Flash Point by Tag Closed Cup Tester, Approved May 1, 2005.
  - (ii) ASTM D 86-07a, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, Approved April 1, 2007.
  - (iii) ASTM D 93-08, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, Approved October 15, 2008.

(iv) ASTM D 240-02 (Reapproved 2007), Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, Approved May 1, 2007.

(v) ASTM D 1078-05, Standard Test Method for Distillation Range of Volatile Organic Liquids, Approved May 15, 2005.

(vi) ASTM D 3278-96 (Reapproved 2004) E1, Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus, Approved November 1, 2004.

(vii) ASTM D 3828-07a, Standard Test Methods for Flash Point by Small Scale Closed Cup Tester, Approved July 15, 2007.

(viii) ISO 10156:1996 (E), Gases and Gas Mixtures--Determination of Fire Potential and Oxidizing Ability for the Selection of Cylinder Valve Outlets, Second Edition, February 15, 1996.

(ix) ISO 10156-2:2005 (E), Gas cylinders--Gases and Gas Mixtures--Part 2: Determination of Oxidizing Ability of Toxic and Corrosive Gases and Gas Mixtures, First Edition, August 1, 2005.

(x) ISO 13943:2000 (E/F), Fire Safety--Vocabulary, First Edition, April, 15, 2000.

(xi) NFPA 30B, Code for the Manufacture and Storage of Aerosol Products, 2007 Edition, Approved August 17, 2006.

(xii) UN ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003.

(qq) [29 CFR § 1910.1200 Appendix C - Allocation Of Label Elements \(Mandatory\).](#)

(rr) [29 CFR § 1910.1200 Appendix D - Safety Data Sheets \(Mandatory\).](#)

(ss) [29 CFR § 1910.1200 Appendix E - Definition of "Trade Secret" \(Mandatory\).](#)

(i) UN ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003.

(tt) [29 CFR § 1910.1450 Occupational Exposure to Hazardous Chemicals in Laboratories.](#)

(3) 29 CFR § 1926.1100 to 1152 (Subpart Z) Toxic and Hazardous Substances.

(a) [29 CFR § 1926.1101 Asbestos.](#)

(i) [29 CFR § 1926.1101 Appendix A - OSHA Reference Method – Mandatory.](#)

(ii) [29 CFR § 1926.1101 Appendix C - Qualitative and quantitative fit testing procedures – Mandatory.](#)

(iii) [29 CFR § 1926.1101 Appendix D - Medical questionnaires; mandatory.](#)

(iv) [29 CFR § 1926.1101 Appendix E - Interpretation and classification of chest roentgenograms – mandatory.](#)

(b) [29 CFR § 1926.1102 Coal tar pitch volatiles; interpretation of term.](#)

- (c) [29 CFR § 1926.1103 13 Carcinogens \(4-Nitrobiphenyl, etc.\)](#)
- (d) [29 CFR § 1926.1104 alpha-Naphthylamine.](#)
- (e) [29 CFR § 1926.1106 Methyl chloromethyl ether.](#)
- (f) [29 CFR § 1926.1107 3,3'-Dichlorobenzidine \(and its salts\).](#)
- (g) [29 CFR § 1926.1108 bis-Chloromethyl ether.](#)
- (h) [29 CFR § 1926.1109 beta-Naphthylamine.](#)
- (i) [29 CFR § 1926.1110 Benzidine.](#)
- (j) [29 CFR § 1926.1111 4-Aminodiphenyl.](#)
- (k) [29 CFR § 1926.1112 Ethyleneimine.](#)
- (l) [29 CFR § 1926.1113 beta-Propiolactone.](#)
- (m) [29 CFR § 1926.1114 2-Acetylaminofluorene.](#)
- (n) [29 CFR § 1926.1115 4-Dimethylaminoazobenzene.](#)
- (o) [29 CFR § 1926.1116 N-Nitrosodimethylamine.](#)
- (p) [29 CFR § 1926.1117 Vinyl chloride.](#)
- (q) [29 CFR § 1926.1118 Inorganic arsenic.](#)
- (r) [29 CFR § 1926.1126 Chromium \(VI\).](#)
- (s) [29 CFR § 1926.1127 Cadmium.](#)
- (t) [29 CFR § 1926.1127 Appendix A - Substance Safety Data Sheet –](#)

Cadmium.

- (u) [29 CFR § 1926.1127 Appendix B - Substance Technical Guidelines for](#)

Cadmium.

- (v) [29 CFR § 1926.1127 Appendix C - Qualitative and Quantitative Fit](#)

Testing Procedures.

- (w) [29 CFR § 1926.1127 Appendix D - Occupational Health History](#)

Interview With Reference to Cadmium Exposure.

- (x) [29 CFR § 1926.1127 Appendix E - Cadmium in Workplace](#)

Atmospheres.

- (y) [29 CFR § 1926.1128 Benzene.](#)
- (z) [29 CFR § 1926.1129 Coke oven emissions.](#)
- (aa) [29 CFR § 1926.1144 1,2-dibromo-3-chloropropane.](#)
- (bb) [29 CFR § 1926.1145 Acrylonitrile.](#)
- (cc) [29 CFR § 1926.1147 Ethylene oxide.](#)
- (dd) [29 CFR § 1926.1148 Formaldehyde.](#)
- (ee) [29 CFR § 1926.1152 Methylene Chloride.](#)

(ff) [29 CFR § 1926 Subpart Z Appendix A - Designations for General Industry Standards Incorporated Into Body of Construction Standards.](#)

#### **15-5. Bloodborne Pathogens Control (BBP) Policy.**

**a. Scope.** This scope includes, but is not limited to, BBP exposure as it applies to FAA employees who, in the course of their assigned duties, could reasonably be expected to be exposed to blood or Other Potentially Infectious Materials (OPIM) through contact with skin, eyes, mucous membrane, or parenteral contact. This includes, but is not limited to, aircraft accident investigators, health care employees, laboratory technicians, and designated first aid responders. In addition, this section addresses BBP awareness training and “Good Samaritan” acts relating to FAA employees who voluntarily complete first aid and Cardiopulmonary resuscitation (CPR) training or become volunteer lay responders.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Prevention of bloodborne pathogen-related injuries and illnesses through established and implemented safety and health controls.
- (2) Informing employees of the risks, procedures, Occupational Medical Surveillance requirements, and PPE required to mitigate the risk of BBP or OPIM exposure.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office’s, or Center’s occupational hazards:

- (1) [29 CFR § 1910.1030 Bloodborne pathogens.](#)
  - (a) [29 CFR § 1910.1030 Appendix A - Hepatitis B Vaccine Declination \(Mandatory\).](#)
- (2) [29 CFR § 1910.1200 Hazard Communication.](#)
  - (a) ASTM D 1078-05, Standard Test Method for Distillation Range of Volatile Organic Liquids, Approved May 15, 2005.
  - (b) ASTM D 240-02 (Reapproved 2007), Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, Approved May 1, 2007.
  - (c) ASTM D 3278-96 (Reapproved 2004) E1, Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus, Approved November 1, 2004.
  - (d) ASTM D 3828-07a, Standard Test Methods for Flash Point by Small Scale Closed Cup Tester, Approved July 15, 2007.
  - (e) ASTM D 56-05, Standard Test Method for Flash Point by Tag Closed Cup Tester, Approved May 1, 2005.
  - (f) ASTM D 86-07a, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, Approved April 1, 2007.
  - (g) ASTM D 93-08, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, Approved October 15, 2008.

(h) ISO 10156:1996 (E), Gases and Gas Mixtures--Determination of Fire Potential and Oxidizing Ability for the Selection of Cylinder Valve Outlets, Second Edition, February 15, 1996.

(i) ISO 10156-2:2005 (E), Gas cylinders--Gases and Gas Mixtures--Part 2: Determination of Oxidizing Ability of Toxic and Corrosive Gases and Gas Mixtures, First Edition, August 1, 2005.

(j) ISO 13943:2000 (E/F), Fire Safety--Vocabulary, First Edition, April 15, 2000.

(k) NFPA 30B, Code for the Manufacture and Storage of Aerosol Products, 2007 Edition, Approved August 17, 2006.

(l) UN ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003.

(3) [29 CFR § 1926.59 Hazard Communication.](#)

(4) [5 USC 552a Privacy Act of 1974.](#)

#### **15-6. Asbestos Control Policy.**

**a. Scope.** This scope applies to all FAA employees who work in FAA-owned or leased, GSA-controlled, or Department of Defense-controlled workplaces with asbestos-containing materials (ACM) and presumed asbestos-containing materials (PACM). This policy is intended to ensure all FAA employees are protected from exposure to airborne asbestos fibers in excess of regulatory standards.

**b. Objectives.** The primary objectives include the following focus areas:

(1) Prevention of exposure to airborne asbestos fibers in excess of regulatory limits through established and implemented safety and health requirements.

(2) Providing procedures to identify the presence and location of ACM/PACM in FAA workplaces.

(3) Providing procedures for managing asbestos in workplaces. These procedures must be included within a written Asbestos Control Program Plan.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

(1) [29 CFR § 1910.1001 Asbestos.](#)

(a) [29 CFR § 1910.1001 Appendix A - OSHA Reference Method – Mandatory.](#)

(i) [OSHA Method ID-160](#) (most current version)

(ii) [NIOSH Method 7400](#) (most current version)

(b) [29 CFR § 1910.1001 Appendix C - Qualitative and quantitative fit testing procedures – Mandatory.](#)

- (c) [29 CFR § 1910.1001 Appendix D - Medical questionnaires – Mandatory.](#)
- (d) [29 CFR § 1910.1001 Appendix E - Interpretation and classification of chest roentgenograms – Mandatory.](#)
- (e) [29 CFR § 1910.1001 Appendix F - Work practices and engineering controls for automotive brake and clutch inspection, disassembly, repair and assembly – Mandatory.](#)
- (2) [29 CFR § 1926.59 Hazard Communication.](#)
- (3) [29 CFR § 1926.1101 Asbestos.](#)
  - (a) [29 CFR § 1926.1101 Appendix A - OSHA Reference Method – Mandatory.](#)
  - (b) [29 CFR § 1926.1101 Appendix C - Qualitative and quantitative fit testing procedures – Mandatory.](#)
  - (c) [29 CFR § 1926.1101 Appendix D - Medical questionnaires; mandatory.](#)
  - (d) [29 CFR § 1926.1101 Appendix E - Interpretation and classification of chest roentgenograms - mandatory.](#)
  - (e) [29 CFR § 1926.1101 Appendix F - Work practices and engineering controls for automotive brake and clutch inspection, disassembly, repair and assembly – Mandatory.](#)
- (4) [40 CFR § 763 Subpart E, Asbestos Containing Materials in Schools, Asbestos Hazard Emergency Response Act](#) (Employee training and clearance air sampling requirements only).
- (5) EPA’s [“Method for the Determination of Asbestos in Bulk Building Materials” \(EPA/600/R-93/116\).](#)
  - (a) [NIOSH Manual of Analytical Methods, 3rd Edition, Supplement, 1987 Method 7400, “Fibers”.](#)

**d. Additional FAA OSH Standards and Policy.** This policy is designed to meet the compliance requirements in the following:

- (1) The FAA limits asbestos-related work performed by trained FAA employees to Class III and IV work only. Qualified asbestos abatement contractors and qualified, must be used to perform Class I and II asbestos work.
- (2) [EPA National Emission Standards for Hazardous Air Pollutants \(NESHAP\) \(40 CFR 61 Subpart M\).](#)

### **15-7. Lead Control Policy.**

**a. Scope.** This scope includes, but is not limited to, ensuring protection from airborne lead exposure in excess of regulatory standards in all FAA-owned or leased and GSA-controlled workplaces occupied by FAA employees. The scope includes indoor and outdoor lead-contaminated sources with the potential to expose employees above regulatory levels but does

not include potential environmental contamination. Additional employees and materials covered under this section include:

- (1) Occupants of ancillary FAA-owned or leased workplaces, (e.g., day care centers and residential housing), and who perform inspection and/or surveillance activities at workplaces where lead exposure is a potential and existing occupational hazard.
- (2) Products such as lead-containing paints, lead-based paints, lead-containing products (e.g., solders and batteries), and lead-containing materials (e.g., ceramic fixtures, roof sheathing and flashing materials, piping, and brass or chrome water fixtures).
- (3) This section does not address lead in drinking water.

**b. Objectives.** The primary objectives include the following focus areas:

- (1) Prevention of lead-related illnesses through established and implemented safety and health requirements and controls.
- (2) Ensuring hazard analysis and required lead content required assessments are completed prior to disturbance of potential lead coatings, lead-based paint, and materials containing lead to determine if the potential for lead exposure exists.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

- (1) [24 CFR 35 Lead-Based Paint Hazards in Federally Owned and Assisted Housing \(Lead Safe Housing Rule\), effective September 15, 2000.](#)
- (2) [29 CFR § 1910.1025 Lead.](#)
  - (a) [29 CFR § 1910.1025 Appendix A - Substance data sheet for occupational exposure to lead.](#)
  - (b) [29 CFR § 1910.1025 Appendix B - Employee standard summary.](#)
  - (c) [29 CFR § 1910.1025 Appendix C - Medical surveillance guidelines.](#)
  - (d) [29 CFR § 1910.1025 Appendix D - Qualitative fit test protocols.](#)
- (3) [29 CFR § 1910.1200 Hazard Communication.](#)
  - (a) ASTM D 1078-05, Standard Test Method for Distillation Range of Volatile Organic Liquids, Approved May 15, 2005.
  - (b) ASTM D 240-02 (Reapproved 2007), Standard Test Method for Heat of Combustion of Liquid Hydrocarbon Fuels by Bomb Calorimeter, Approved May 1, 2007.
  - (c) ASTM D 3278-96 (Reapproved 2004) E1, Standard Test Methods for Flash Point of Liquids by Small Scale Closed-Cup Apparatus, Approved November 1, 2004.
  - (d) ASTM D 3828-07a, Standard Test Methods for Flash Point by Small Scale Closed Cup Tester, Approved July 15, 2007.
  - (e) ASTM D 56-05, Standard Test Method for Flash Point by Tag Closed Cup Tester, Approved May 1, 2005.



(f) ASTM D 86-07a, Standard Test Method for Distillation of Petroleum Products at Atmospheric Pressure, Approved April 1, 2007.

(g) ASTM D 93-08, Standard Test Methods for Flash Point by Pensky-Martens Closed Cup Tester, Approved October 15, 2008.

(h) ISO 10156:1996 (E), Gases and Gas Mixtures--Determination of Fire Potential and Oxidizing Ability for the Selection of Cylinder Valve Outlets, Second Edition, February 15, 1996.

(i) ISO 10156-2:2005 (E), Gas cylinders--Gases and Gas Mixtures--Part 2: Determination of Oxidizing Ability of Toxic and Corrosive Gases and Gas Mixtures, First Edition, August 1, 2005.

(j) ISO 13943:2000 (E/F), Fire Safety--Vocabulary, First Edition, April 15, 2000.

(k) NFPA 30B, Code for the Manufacture and Storage of Aerosol Products, 2007 Edition, Approved August 17, 2006.

(l) UN ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003.

(4) [29 CFR § 1910.1200 Appendix A - Health Hazard Criteria \(Mandatory\)](#).

(5) [29 CFR § 1910.1200 Appendix B - Physical Criteria \(Mandatory\)](#).

(6) [29 CFR § 1910.1200 Appendix C - Allocation Of Label Elements \(Mandatory\)](#).

(7) [29 CFR § 1910.1200 Appendix D - Safety Data Sheets \(Mandatory\)](#).

(8) [29 CFR § 1910.1200 Appendix E - Definition of "Trade Secret" \(Mandatory\)](#).

(a) UN ST/SG/AC.10/Rev.4, The UN Recommendations on the Transport of Dangerous Goods, Manual of Tests and Criteria, Fourth Revised Edition, 2003.

(9) [29 CFR § 1926.62 Lead in Construction](#).

(10) [40 CFR § 745 Lead-Based Paint Poisoning Prevention in Certain Residential Structures](#).

**Note:** Includes the Federal regulations for the disposal of lead waste and contractor notification requirements.

(11) [40 CFR § 745 Requirements for Lead-Based Paint Activities in Target Housing and Child-Occupied Facilities: Final Rule, August 1996 \(EPA Toxic Substances Control Act, Title IV, Sections 402 and 404\)](#).

**Note:** Includes training and certification requirements for individuals and training providers.

## Chapter 16. Medical Services and First Aid

**16-1. Introduction.** This chapter establishes policy for Workplace Medical Emergency Response. This chapter primarily addresses [29 CFR § 1910 Subpart K Medical and First Aid](#).

### 16-2. Workplace Medical Emergency Response (WMER) Policy.

**a. Scope.** This scope includes, but is not limited to providing information, equipment and prompt and appropriate emergency medical services (EMS) and first aid treatment in the event of injury or illness. The WMER Policy includes EMS and first aid treatment criteria; first aid kits; emergency shower and eyewash devices; and training for first aid, CPR and emergency shower and eyewash devices. The scope does not include Public Access Defibrillation (PAD) and Automated External Defibrillators (AEDs) as these are not Federal Regulatory Requirements.

**b. Objectives.** The primary objectives include the following focus areas:

(1) Providing EMS to employee through established and implemented safety and health requirements. Local EMS will be utilized if they are in near proximity to the FAA workplace. Employees must be trained on the procedures and equipment to summon emergency responders.

(2) Ensuring that in the absence of local EMS in or near the proximity to the workplace, employees are trained to render first aid and, depending on the occupational duties (e.g., certain electrical activities), to render CPR treatment.

(3) Ensuring if an employee works in a rural area, or remote workplace with no reasonable local EMS coverage, or no communication access, the FAA provides appropriate communication equipment and/or acceptable emergency transportation.

(4) Ensuring first aid and CPR training is provided when a regulatory prerequisite requires performing occupational duties as required. Excluding FAA medical professionals and employees designated as first aid responders under FAA directives (e.g., two-person work rules), the act of rendering first aid/CPR by an FAA employee is voluntary.

(5) Providing and maintaining readily accessible first aid kits in accordance with guidelines for first aid kit contents including components and size of kit. First aid kits must include BBP spill clean-up kits.

(6) Where the eyes or body may be exposed to corrosive materials at FAA workplaces, installed, maintained, and suitable quick eye and/or body drenching, or flushing must be provided within the workplace for immediate emergency use. Quick emergency eye and/or body drenching or flushing is considered a type of first aid treatment.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

(1) [5 CFR § 293 Subpart E, Employee Medical File System Records](#).

(2) [29 CFR § 1910.151 Medical services and first aid](#).

- (3) [29 CFR § 1926.23 First aid and medical attention.](#)
- (4) [29 CFR § 1926.50 Medical services and first aid.](#)
- (5) [29 CFR § 1926.951 Medical services and first aid.](#)

## Chapter 17. Construction Safety and Health

**17-1. Introduction.** This chapter establishes policy for construction-related occupational duties including but is not limited to alteration and/or repair, including painting and decorating. OSHA also defines construction as repair of existing workplaces, replacement of structures and components, and this definition must be referred to for clarification when an activity cannot be easily classified as construction or maintenance. This chapter primarily addresses [29 CFR § 1926 Safety and Health Regulations for Construction](#).

### 17-2. Construction Safety and Health Policy.

**a. Scope.** This scope includes, but is not limited to, employees involved in design, acquisition, installation, modification, alteration, maintenance, service work, and equipment operation during stages of construction, renovation, demolition, installation and commissioning. The FAA must ensure the safety and health of employees is maintained when they are exposed to occupational hazards during construction activities.

**b. Objectives.** The primary objectives include the following focus areas:

(1) Prevention of construction-related injuries through established and implemented safety and health requirements by incorporating accepted engineering and administrative controls allowing employees to anticipate, recognize, evaluate, and control construction-related safety and health concerns.

(2) Ensuring regulatory requirements within [29 CFR § 1910](#) and [29 CFR § 1926](#) are addressed within this or other chapters of this order.

(3) Ensuring new construction, equipment installation, or facility upgrades are designed, constructed, and installed to eliminate or engineer out or minimize safety and health hazards.

**c. Regulatory Requirements.** The FAA OSH Policy is to comply with all the following regulations and IBR standards listed below, as applicable to each LOB, Staff Office's, or Center's occupational hazards:

(1) 29 CFR § 1926.1 to 6 (Subpart A) General.

(a) [29 CFR § 1926.1 Purpose and scope](#).

(b) [29 CFR § 1926.2 Variances from safety and health standards](#).

(c) [29 CFR § 1926.3 Inspections - right of entry](#).

(d) [29 CFR § 1926.4 Rules of practice for administrative adjudications for enforcement of safety and health standards](#).

(e) [29 CFR § 1926.5 OMB control numbers under the Paperwork Reduction Act](#).

(f) [29 CFR § 1926.6 Incorporation by reference](#).

(2) 29 CFR § 1926.10 to 16 (Subpart B) General Interpretations.

- (a) [29 CFR § 1926.10 Scope of subpart.](#)
  - (b) [29 CFR § 1926.11 Coverage under section 103 of the act distinguished.](#)
  - (c) [29 CFR § 1926.12 Reorganization Plan No. 14 of 1950.](#)
  - (d) [29 CFR § 1926.13 Interpretation of statutory terms.](#)
  - (e) [29 CFR § 1926.14 Federal contracts for "mixed" types of performance.](#)
  - (f) [29 CFR § 1926.15 Relationship to the Service Contract Act; Walsh-Healey Public Contracts Act.](#)
  - (g) [29 CFR § 1926.16 Rules of construction.](#)
- (3) 29 CFR § 1926.20 to 30 (Subpart C) General Safety and Health Provisions.
- (a) [29 CFR § 1926.20 General safety and health provisions.](#)
  - (b) [29 CFR § 1926.25 Housekeeping.](#)
  - (c) [29 CFR § 1926.26 Illumination.](#)
  - (d) [29 CFR § 1926.27 Sanitation.](#)
  - (e) [29 CFR § 1926.29 Acceptable certifications.](#)
  - (f) [29 CFR § 1926.30 Shipbuilding and ship repairing.](#)
- (4) 29 CFR § 1926.50 to 66 (Subpart D) Occupational Health and Environmental Controls.
- (a) [29 CFR § 1926.50 Medical services and first aid.](#)
  - (b) [29 CFR § 1926.51 Sanitation.](#)
  - (c) [29 CFR § 1926.53 - Ionizing radiation.](#)
  - (d) [29 CFR § 1926.54 - Nonionizing radiation.](#)
  - (e) [29 CFR § 1926.55 Gases, vapors, fumes, dusts, and mists.](#)
  - (f) [29 CFR § 1926.55 Appendix A - Gases, vapors, fumes, dusts, and mists.](#)
  - (g) [29 CFR § 1926.56 Illumination.](#)
  - (h) [29 CFR § 1926.57 Ventilation.](#)
  - (i) [29 CFR § 1926.61 Retention of DOT markings, placards and labels.](#)
  - (j) [29 CFR § 1926.64 Process safety management of highly hazardous chemicals.](#)
  - (k) [29 CFR § 1926.65 Hazardous waste operations and emergency response.](#)
  - (l) [29 CFR § 1926.66 Criteria for design and construction for spray booths.](#)
- (5) 29 CFR § 1926.95 to 107 (Subpart E) Personal Protective and Life Saving Equipment.
- (a) [29 CFR § 1926.95 Criteria for personal protective equipment.](#)
  - (b) [29 CFR § 1926.104 Safety belts, lifelines, and lanyards.](#)

- (c) [29 CFR § 1926.105 Safety nets.](#)
- (d) [29 CFR § 1926.106 Working over or near water.](#)
- (e) [29 CFR § 1926.107 Definitions applicable to this subpart.](#)
- (6) 29 CFR § 1926.150 to 159 (Subpart F) Fire Protection and Prevention.
  - (a) [29 CFR § 1926.150 Fire protection.](#)
  - (b) [29 CFR § 1926.151 Fire prevention.](#)
  - (c) [29 CFR § 1926.152 Flammable and combustible liquids.](#)
  - (d) [29 CFR § 1926.153 Liquefied petroleum gas \(LP-Gas\).](#)
  - (e) [29 CFR § 1926.154 Temporary heating devices.](#)
  - (f) [29 CFR § 1926.155 Definitions applicable to this subpart.](#)
  - (g) [29 CFR § 1926.156 Fixed extinguishing systems, general.](#)
  - (h) [29 CFR § 1926.157 Fixed extinguishing systems, gaseous agent.](#)
  - (i) [29 CFR § 1926.158 Fire detection systems.](#)
  - (j) [29 CFR § 1926.159 Employee alarm systems.](#)
- (7) 29 CFR § 1926.200 to 203 (Subpart G) Signs, Signals, and Barricades.
  - (a) [29 CFR § 1926.200 Accident prevention signs and tags.](#)
  - (b) [29 CFR § 1926.201 Signaling.](#)
  - (c) [29 CFR § 1926.202 Barricades.](#)
  - (d) [29 CFR § 1926.203 Definitions applicable to this subpart.](#)
- (8) 29 CFR § 1926.250 to 252 (Subpart H) Materials Handling, Storage, Use, and Disposal.
  - (a) [29 CFR § 1926.250 General requirements for storage.](#)
  - (b) [29 CFR § 1926.251 Rigging equipment for material handling.](#)
  - (c) [29 CFR § 1926.252 Disposal of waste materials.](#)
- (9) 29 CFR § 1926.300 to 307 (Subpart I) Tools - Hand and Power.
  - (a) [29 CFR § 1926.304 Woodworking tools.](#)
  - (b) [29 CFR § 1926.305 Jacks - lever and ratchet, screw and hydraulic.](#)
  - (c) [29 CFR § 1926.306 Air Receivers.](#)
  - (d) [29 CFR § 1926.307 Mechanical power-transmission apparatus.](#)
- (10) 29 CFR § 1926.350 to 354 (Subpart J) Welding and Cutting.
  - (a) [29 CFR § 1926.350 - Gas welding and cutting.](#)
  - (b) [29 CFR § 1926.351 - Arc welding and cutting.](#)
  - (c) [29 CFR § 1926.352 - Fire prevention.](#)

- (d) [29 CFR § 1926.353 - Ventilation and protection in welding, cutting, and heating.](#)
  - (e) [29 CFR § 1926.354 - Welding, cutting, and heating in way of preservative coatings.](#)
- (11) 29 CFR § 1926.400 to 449 (Subpart K) Electrical.
- (a) [29 CFR § 1926.404 Wiring design and protection.](#)
  - (b) [29 CFR § 1926.405 Wiring methods, components, and equipment for general use.](#)
  - (c) [29 CFR § 1926.406 Specific purpose equipment and installations.](#)
  - (d) [29 CFR § 1926.407 Hazardous \(classified\) locations.](#)
  - (e) [29 CFR § 1926.408 Special systems.](#)
  - (f) [29 CFR § 1926.431 Maintenance of equipment.](#)
  - (g) [29 CFR § 1926.432 Environmental deterioration of equipment.](#)
  - (h) [29 CFR § 1926.441 Battery locations and battery charging.](#)
  - (i) [29 CFR § 1926.449 Definitions applicable to this subpart.](#)
- (12) [29 CFR § 1926 Subpart L – Scaffolds.](#)
- (a) [Appendix A to Subpart L – Scaffold Specifications.](#)
  - (b) [Appendix B To Subpart L – Criteria for Determining the Feasibility of Providing Safe Access and Fall Protection for Scaffold Erectors and Dismantlers.](#)
  - (c) [Appendix C To Subpart L – List of National Consensus Standards.](#)
  - (d) [Appendix D To Subpart L – List of Training Topics for Scaffold Erectors and Dismantlers.](#)
  - (e) [Appendix E To Subpart L – Drawings and Illustrations.](#)
- (13) 29 CFR § 1926.500 to 503 Subpart M - Fall Protection.
- (a) [29 CFR § 1926.500 Scope, application, and definitions applicable to this subpart.](#)
  - (b) [29 CFR § 1926.501 Duty to have fall protection.](#)
  - (c) [29 CFR § 1926.502 Fall protection systems criteria and practices.](#)
- (14) 29 CFR § 1926.551 to 555 (Subpart N) Cranes, Derricks, Hoists, Elevators, and Conveyors.
- (a) [29 CFR § 1926.552 Material hoists, personnel hoists and elevators.](#)
  - (b) [29 CFR § 1926.553 Base-mounted drum hoists.](#)
  - (c) [29 CFR § 1926.554 Overhead hoists.](#)
  - (d) [29 CFR § 1926.555 Conveyors.](#)

(15) 29 CFR § 1926.600 to 606 (Subpart O) Motor Vehicles, Mechanized Equipment, and Marine Operations.

- (a) [29 CFR § 1926.600 Equipment.](#)
- (b) [29 CFR § 1926.603 Pile driving equipment.](#)
- (c) [29 CFR § 1926.604 Site clearing.](#)
- (d) [29 CFR § 1926.605 Marine operations and equipment.](#)
- (e) [29 CFR § 1926.606 Definitions applicable to this subpart.](#)

(16) 29 CFR § 1926.650 to 652 (Subpart P) Excavations.

[subpart.](#)

- (a) [29 CFR § 1926.650 Scope, application, and definitions applicable to this](#)
- (b) [29 CFR § 1926.651 Specific Excavation Requirements.](#)
- (c) [29 CFR § 1926.652 Requirements for protective systems.](#)
- (d) [Appendix A To Subpart P - Soil Classification.](#)
- (e) [Appendix B To Subpart P - Sloping And Benching.](#)
- (f) [Appendix C To Subpart P - Timber Shoring For Trenches.](#)
- (g) [Appendix D To Subpart P - Aluminum Hydraulic Shoring For Trenches.](#)
- (h) [Appendix E To Subpart P - Alternatives To Timber Shoring.](#)
- (i) [Appendix F To Subpart P - Selection Of Protective Systems.](#)

(17) 29 CFR § 1926.700 to 706 (Subpart Q) Concrete and Masonry Construction.

[this subpart.](#)

- (a) [29 CFR § 1926.700 Scope, application, and definitions, applicable to](#)
- (b) [29 CFR § 1926.701 General requirements.](#)
- (c) [29 CFR § 1926.702 Requirements for equipment and tools.](#)
- (d) [29 CFR § 1926.703 Requirements for cast-in-place concrete.](#)
- (e) [29 CFR § 1926.704 Requirements for precast concrete.](#)
- (f) [29 CFR § 1926.705 Requirements for lift-slab construction operations.](#)
- (g) [29 CFR § 1926.706 Requirements of masonry construction.](#)
- (h) [Appendix To Subpart Q - References To Subpart Q of Part 1926.](#)

(18) 29 CFR § 1926.750 to 761 (Subpart R) Steel Erection.

- (a) [29 CFR § 1926.750 Scope.](#)
- (b) [29 CFR § 1926.751 Definitions.](#)
- (c) [29 CFR § 1926.752 Site layout, site-specific erection plan and](#)  
[construction sequence.](#)
- (d) [29 CFR § 1926.753 Hoisting and rigging.](#)



- (e) [29 CFR § 1926.754 Structural steel assembly.](#)
- (f) [29 CFR § 1926.755 Column anchorage.](#)
- (g) [29 CFR § 1926.756 Beams and columns.](#)
- (h) [29 CFR § 1926.757 Open web steel joists.](#)
- (i) [29 CFR § 1926.758 Systems-engineered metal buildings.](#)
- (j) [29 CFR § 1926.759 Falling object protection.](#)
- (k) [29 CFR § 1926.760 Fall protection.](#)
- (l) [29 CFR § 1926.761 Training.](#)
- (m) [Appendix G to Subpart R - Fall Protection Systems Criteria and](#)

[Practices.](#)

(19) 29 CFR § 1926.800 to 804 (Subpart S) Tunnels and Shafts, Caissons, Cofferdams, and Compressed Air.

- (a) [29 CFR § 1926.800 Underground construction.](#)
- (b) [29 CFR § 1926.801 Caissons.](#)
- (c) [29 CFR § 1926.802 Cofferdams.](#)
- (d) [29 CFR § 1926.803 Compressed air.](#)
- (e) [29 CFR § 1926.804 Definitions applicable to this subpart.](#)
- (f) [Appendix A to Subpart S - Decompression Tables.](#)

(20) 29 CFR § 1926.850 to 860 (Subpart T) Demolition.

- (a) [29 CFR § 1926.850 Preparatory operations.](#)
  - (b) [29 CFR § 1926.851 Stairs, passageways, and ladders.](#)
  - (c) [29 CFR § 1926.852 Chutes.](#)
  - (d) [29 CFR § 1926.853 Removal of materials through floor openings.](#)
  - (e) [29 CFR § 1926.854 Removal of walls, masonry sections, and chimneys.](#)
  - (f) [29 CFR § 1926.855 Manual removal of floors.](#)
  - (g) [29 CFR § 1926.856 Removal of walls, floors, and material with](#)
- [equipment.](#)
- (h) [29 CFR § 1926.857 Storage.](#)
  - (i) [29 CFR § 1926.858 Removal of steel construction.](#)
  - (j) [29 CFR § 1926.859 Mechanical demolition.](#)
  - (k) [29 CFR § 1926.860 Selective demolition by explosives.](#)

(21) 29 CFR § 1926.900 to 914 (Subpart U) Blasting and Use of Explosives.

- (a) [29 CFR § 1926.900 General provisions.](#)

- (b) [29 CFR § 1926.901 Blaster qualifications.](#)
  - (c) [29 CFR § 1926.902 Surface transportation of explosives.](#)
  - (d) [29 CFR § 1926.903 Underground transportation of explosives.](#)
  - (e) [29 CFR § 1926.904 Storage of explosives and blasting agents.](#)
  - (f) [29 CFR § 1926.905 Loading of explosives or blasting agents.](#)
  - (g) [29 CFR § 1926.906 Initiation of explosive charges - electric blasting.](#)
  - (h) [29 CFR § 1926.907 Use of safety fuse.](#)
  - (i) [29 CFR § 1926.908 Use of detonating cord.](#)
  - (j) [29 CFR § 1926.909 Firing the blast.](#)
  - (k) [29 CFR § 1926.910 Inspection after blasting.](#)
  - (l) [29 CFR § 1926.911 Misfires.](#)
  - (m) [29 CFR § 1926.912 Underwater blasting.](#)
  - (n) [29 CFR § 1926.913 Blasting in excavation work under compressed air.](#)
  - (o) [29 CFR § 1926.914 Definitions applicable to this subpart.](#)
- (22) 29 CFR § 1926.950 to 960 (Subpart V) Power Transmission and Distribution.
- (a) [29 CFR § 1926.950 General.](#)
  - (b) [29 CFR § 1926.951 Medical services and first aid.](#)
  - (c) [29 CFR § 1926.952 Job briefing.](#)
  - (d) [29 CFR § 1926.953 Enclosed spaces.](#)
  - (e) [29 CFR § 1926.954 Personal protective equipment.](#)
  - (f) [29 CFR § 1926.955 Portable ladders and platforms.](#)
  - (g) [29 CFR § 1926.956 Hand and portable power equipment.](#)
  - (h) [29 CFR § 1926.957 Live-line tools.](#)
  - (i) [29 CFR § 1926.958 Materials handling and storage.](#)
  - (j) [29 CFR § 1926.959 Mechanical equipment.](#)
  - (k) [29 CFR § 1926.960 Working on or near exposed energized parts.](#)
- (23) 29 CFR § 1926.1000 to 1003 (Subpart W) Rollover Protective Structures (ROPS); Overhead Protection.
- (a) [29 CFR § 1926.1000 ROPS for material handling equipment.](#)
  - (b) [29 CFR § 1926.1001 Minimum performance criteria for rollover protective structures for designated scrapers, loaders, dozers, graders, and crawler tractors.](#)
  - (c) [29 CFR § 1926.1002 Protective frames \(roll-over protective structures, known as ROPS\) for wheel-type agricultural and industrial tractors used in construction.](#)

(d) [29 CFR § 1926.1003 Overhead protection for operators of agricultural and industrial tractors.](#)

(e) [Appendix A To Subpart W - Figures W-14 Through W-28.](#)

(24) 29 CFR § 1926.1050 to 1060 (Subpart X) Stairways and Ladders.

(a) [29 CFR § 1926.1050 Scope, application, and definitions applicable to this subpart.](#)

(b) [29 CFR § 1926.1051 General Requirements.](#)

(c) [29 CFR § 1926.1052 Stairways.](#)

(d) [29 CFR § 1926.1053 Ladders.](#)

(e) [29 CFR § 1926.1060 Training Requirements.](#)

(f) [Appendix A To Subpart X – Ladders.](#)

(25) 29 CFR § 1926.1071 to 1091 (Subpart Y) Commercial Diving Operations.

(a) [29 CFR § 1926.1071 Scope and application.](#)

(b) [29 CFR § 1926.1072 Definitions.](#)

(c) [29 CFR § 1926.1076 Qualifications of dive team.](#)

(d) [29 CFR § 1926.1080 Safe practices manual.](#)

(e) [29 CFR § 1926.1081 Pre-dive procedures.](#)

(f) [29 CFR § 1926.1082 Procedures during dive.](#)

(g) [29 CFR § 1926.1083 Post-dive procedures.](#)

(h) [29 CFR § 1926.1084 SCUBA diving.](#)

(i) [29 CFR § 1926.1085 Surface-supplied air diving.](#)

(j) [29 CFR § 1926.1086 Mixed-gas diving.](#)

(k) [29 CFR § 1926.1087 Liveboating.](#)

(l) [29 CFR § 1926.1090 Equipment.](#)

(m) [29 CFR § 1926.1091 Recordkeeping requirements.](#)

(n) [Appendix A To Subpart Y - Examples Of Conditions Which May Restrict Or Limit Exposure To Hyperbaric Conditions.](#)

(o) [Appendix B To Subpart Y - Guidelines For Scientific Diving.](#)

(26) [29 CFR § 1926 Subpart Z - Toxic and Hazardous Substances.](#)

(27) 29 CFR § 1926.1400 to 1442 (Subpart CC) Cranes and Derricks in Construction.

(a) [29 CFR § 1926.1400 Scope.](#)

(b) [29 CFR § 1926.1401 Definitions.](#)

(c) [29 CFR § 1926.1402 Ground conditions.](#)

- (d) [29 CFR § 1926.1403 Assembly/Disassembly--selection of manufacturer or employer procedures.](#)
- (e) [29 CFR § 1926.1404 Assembly/Disassembly--general requirements \(applies to all assembly and disassembly operations\).](#)
- (f) [29 CFR § 1926.1405 Disassembly--additional requirements for dismantling of booms and jibs \(applies to both the use of manufacturer procedures and employer procedures\).](#)
- (g) [29 CFR § 1926.1406 Assembly/Disassembly--employer procedures--general requirements.](#)
- (h) [29 CFR § 1926.1407 Power line safety \(up to 350 kV\)--assembly and disassembly.](#)
- (i) [29 CFR § 1926.1408 Power line safety \(up to 350 kV\)--equipment operations.](#)
- (j) [29 CFR § 1926.1409 Power line safety \(over 350 kV\).](#)
- (k) [29 CFR § 1926.1410 Power line safety \(all voltages\)--equipment operations closer than the Table A zone.](#)
- (l) [29 CFR § 1926.1411 Power line safety--while traveling.](#)
- (m) [29 CFR § 1926.1412 Inspections.](#)
- (n) [29 CFR § 1926.1413 Wire rope--inspection.](#)
- (o) [29 CFR § 1926.1414 Wire rope--selection and installation criteria.](#)
- (p) [29 CFR § 1926.1415 Safety devices.](#)
- (q) [29 CFR § 1926.1416 Operational aids.](#)
- (r) [29 CFR § 1926.1417 Operation.](#)
- (s) [29 CFR § 1926.1418 Authority to stop operation.](#)
- (t) [29 CFR § 1926.1419 Signals--general requirements.](#)
- (u) [29 CFR § 1926.1420 Signals--radio, telephone or other electronic transmission of signals.](#)
- (v) [29 CFR § 1926.1421 Signals--voice signals--additional requirements.](#)
- (w) [29 CFR § 1926.1422 Signals--hand signal chart.](#)
- (x) [29 CFR § 1926.1423 Fall protection.](#)
- (y) [29 CFR § 1926.1424 Work area control.](#)
- (z) [29 CFR § 1926.1425 Keeping clear of the load.](#)
- (aa) [29 CFR § 1926.1426 Free fall and controlled load lowering.](#)
- (bb) [29 CFR § 1926.1427 Operator qualification and certification.](#)
- (cc) [29 CFR § 1926.1428 Signal person qualifications.](#)

- (dd) [29 CFR § 1926.1429 Qualifications of maintenance & repair employees.](#)
- (ee) [29 CFR § 1926.1430 Training.](#)
- (ff) [29 CFR § 1926.1431 Hoisting personnel.](#)
- (gg) [29 CFR § 1926.1432 Multiple-crane/derrick lifts--supplemental requirements.](#)
- (hh) [29 CFR § 1926.1433 Design, construction and testing.](#)
- (ii) [29 CFR § 1926.1434 Equipment modifications.](#)
- (jj) [29 CFR § 1926.1435 Tower cranes.](#)
- (kk) [29 CFR § 1926.1436 Derricks.](#)
- (ll) [29 CFR § 1926.1437 Floating cranes/derricks and land cranes/derricks on barges.](#)
- (mm) [29 CFR § 1926.1438 Overhead & gantry cranes.](#)
- (nn) [29 CFR § 1926.1439 Dedicated pile drivers.](#)
- (oo) [29 CFR § 1926.1440 Sideboom cranes.](#)
- (pp) [29 CFR § 1926.1441 Equipment with a rated hoisting/lifting capacity of 2,000 pounds or less.](#)
- (qq) [29 CFR § 1926.1442 Severability.](#)
- (rr) [Appendix A to Subpart CC of part 1926--Standard Hand Signals.](#)
- (ss) [Appendix B to Subpart CC of part 1926--Assembly/Disassembly--Sample Procedures for Minimizing the Risk of Unintended Dangerous Boom Movement.](#)
- (tt) [Appendix C to Subpart CC of part 1926--Operator Certification--Written Examination--Technical Knowledge Criteria.](#)
- (uu) [Appendix A To Subpart Z - Designations For General Industry Standards Incorporated Into Body Of Construction Standards.](#)

## Chapter 18. Administrative Information

**18-1. Distribution.** This order will be distributed electronically. All FAA employees can access this order on the [DMS website](#) referenced in Section 1-3.

**Appendix A. Acronyms**

| <b>Acronym</b> | <b>Definition</b>   |
|----------------|---|
| AAI-RMA        | Agriculture Ammonia Institute-Rubber manufacturing Association        |
| ACM            | Asbestos-Containing Materials   |
| AED            | Automated External Defibrillator                                      |
| ANSI           | American National Standards Institute                                 |
| API            | American Petroleum Institute  |
| ASAE           | American Society for Agricultural Engineers                           |
| ASME           | American Society of Mechanical Engineers                              |
| ASTM           | American Society for Testing and Materials                            |
| AWS            | American Welding Society  |
| BBP            | Bloodborne Pathogens  |
| CDSH           | Collateral Duty Safety and Health                                     |
| CERCLA         | Comprehensive Environmental Response, Compensation, and Liability Act |
| CFR            | Code of Federal Regulations   |
| CGA            | Compressed Gas Association  |
| CMAA           | Crane Manufacturer's Association of America                           |
| CPL            | Compliance Directive  |
| CPR            | Cardiopulmonary Resuscitation   |
| CS             | Confined Space  |
| CS             | Commercial Standard   |
| DASHO          | Designated Agency Safety and Health Official                          |
| DMS            | Directives Management System  |
| DOT            | Department of Transportation  |
| EMS            | Emergency Medical Services  |
| EPA            | Environmental Protection Agency                                       |
| FAA            | Federal Aviation Administration                                       |
| FAR            | Federal Aviation Regulations  |
| FLS            | Fire Life Safety  |
| FMR            | Federal Management Regulation   |
| GHS            | Globally Harmonized System  |
| GSA            | General Services Administration                                       |
| HazCom         | Hazard Communication  |
| HAZWOPER       | Hazardous Waste Operations and Emergency Response                     |
| HEW            | U.S. Department of Health, Education, and Welfare                     |

| <b>Acronym</b> | <b>Definition</b>  |
|----------------|--|
| IBR            | Incorporated by Reference                                |
| ICC            | International Code Council                               |
| IFC            | International Fire Code                                  |
| ISO            | International Organization for Standardization           |
| LOTO           | Lockout/Tagout   |
| LP             | Liquefied Petroleum                                      |
| MHS            | Material Handling and Storage                            |
| NEMA           | National Electrical Manufacturer's Association           |
| NESHAP         | National Emission Standards for Hazardous Air Pollutants |
| NFPA           | National Fire Protection Association                     |
| NFPA           | National Forest Products Association                     |
| NIOSH          | National Institute for Occupational Safety and Health    |
| NRTL           | Nationally Recognized Testing Laboratory                 |
| Occ Exp        | Occupational Exposure                                    |
| OPIM           | Other Potentially Infectious Materials                   |
| OSH            | Occupational Safety and Health                           |
| OSHA           | Occupational Safety and Health Administration            |
| PACM           | Presumed Asbestos Containing Materials                   |
| PAD            | Public Access Defibrillation                             |
| PCSA           | Power Crane and Shovel Association                       |
| POC            | Point of Contact   |
| PPE            | Personal Protective Equipment                            |
| PRCS           | Permit-Required Confined Space                           |
| RCRA           | Resource Conservation and Recovery Act                   |
| ROPS           | Rollover protective structures                           |
| SAE            | Society of Automotive Engineers                          |
| SARA           | Superfund Amendments and Reauthorization Act             |
| SDS            | Safety Data Sheet  |
| UL             | Underwriters Laboratory                                  |
| UN             | United Nations   |
| USAS           | United States of America Standards Institute             |
| USC            | United States Code                                       |
| WMER           | Workplace Medical Emergency Response                     |



### Appendix B. 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: DASHO  
Subject: FAA Order 3900.19C, Federal Aviation Administration (FAA) Occupational Safety and Health Policy – Document Feedback / Revision Suggestions

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

- a. 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 you want to add, include OSH regulatory references if applicable).

Include the following information for the OPR to respond appropriately:

- (1) Submitted by: \_\_\_\_\_.
- (2) Submission date: \_\_\_\_\_.
- (3) Telephone: \_\_\_\_\_.
- (4) Routing code: \_\_\_\_\_.
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