U.S. DEPARTMENT OF TRANSPORTATION
FEDERAL AVIATION ADMINISTRATION
Air Traffic Organization Policy

ORDER JO 3900.57A

Effective Date:
03/05/2013

SUBJ: Environmental and Occupational Safety and Health (EOSH) Requirements in the Planning and Execution of Construction and Maintenance Activities at National Airspace System (NAS) Facilities

1. The Federal Aviation Administration (FAA) is subject to numerous federal, state, and local requirements in the areas of environmental protection and employee safety. Consistent with the FAA's mission to be the national and international leader in aviation, while fostering a safe, secure, and efficient aviation system, is the need for an effective process to incorporate environmental and occupational safety and health requirements in the planning, design, construction, maintenance and decommissioning activities at NAS facilities.

2. This order prescribes policy, delegates authority, and assigns responsibility for ensuring agency compliance with environmental and occupational safety and health requirements. This order is in concert with the following:

a. FAA Order 1050.10C, Prevention, Control and Abatement of Environmental Pollution at FAA Facilities, establishes agency wide policy, roles, and responsibilities pertaining to the prevention, control, and abatement of environmental pollution at, or from, FAA-owned, -leased, -licensed, or -operated facilities.

b. FAA Order 1050.17, Airway Facilities Environmental and Safety Compliance Program, prescribes procedures and assigns responsibilities within the Air Traffic Organization (ATO) for the implementation of FAA Order 1050.10C.

J. David Grizzle
Chief Operating Officer
Air Traffic Organization

Distribution: Select Air Traffic Organization Offices; A-FAF-0(STD)

Initiated By: AJW-23

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Chapter 1. General Requirements

1-1. Purpose of This Order. The purpose of this FAA order is to prescribe FAA's environmental and occupational safety and health (EOSH) policy, delegation of authority, and assignment of responsibility to ensure agency compliance, and establishing effective processes that incorporate EOSH requirements in planning, design, construction, maintenance and decommissioning of National Airspace System (NAS) systems and facilities that will foster a safe, secure and efficient NAS.

1-2. Audience. Air Traffic Organization (ATO) headquarters and field organizations that are involved with the operation and support of NAS facilities. At the headquarters level, these organizations include En Route and Oceanic Services (AJE), Finance (AJF), System Operations Services (AJR), Safety and Technical Training (AJI), Terminal Services (AJT), Mission Support Services (AJV), and Technical Operations Services (AJW). At the field level, this includes the Service Center, Service Areas, and all of the organizations subordinate to the Service Areas involved with the operation and/or support of NAS facilities.

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/, or go to the MyFAA Employee website, select 'Tools and Resources', then select 'Orders and Notices'.

1-4. Cancellation. FAA Order 3900.57, FAA Pre-Construction and Maintenance Project Safety and Health Checklist, dated January 11, 1999, is canceled.

1-5. Explanation of Policy Changes. The order has been revised to include:

a. Roles and Responsibilities. Provides updated roles and responsibilities reflecting current FAA organizational structure and assignment of program responsibilities.

b. Project Management. Requires the review of EOSH requirements prior to budget planning and the completion of checklists for design, construction, and maintenance activities that have the potential to generate EOSH impacts to FAA employees and NAS operations. The order addresses project management aspects of EOSH planning and requirements throughout the facility lifecycle.

c. EOSH Requirements. Establishes a process that will minimize and/or eliminate EOSH impacts from design, construction, and maintenance projects at NAS facilities. The order addresses EOSH requirements in order to minimize NAS outages, environmental impacts, and employee safety risks.

1-6. Effective Date. The requirements of this directive are to become effective six months after publication.

1-7. Roles and Responsibilities.

a. Chief Operating Officer, AJO-0, ensures that ATO organizations implement the requirements of this order into the planning and execution of their programs and activities.

b. Vice President, En Route and Oceanic Services, AJE-0, implements the requirements of this order into the design and deployment of new systems as well as the modernization and/or refurbishment of existing NAS facilities; and implements the requirements of this order into planning for lifecycle requirements.

c. Vice President, Office of Safety and Technical Training, AJI-0, implements the requirements of this order into training programs and other activities managed by his or her organization, including any interaction of this order with the Safety Management System (SMS).

d. Vice President, System Operations, AJR-0, implements the requirements of this order into programs and activities managed by their organization.

e. Vice President, Terminal Services, AJT-0, implements the requirements of this order into the planning, design, and deployment of new systems as well as the modernization and/or refurbishment of existing NAS facilities; and implements the requirements of this order into planning for lifecycle requirements.

f. Vice President, Mission Support Services, AJV-0, implements the requirements of this order into programs and activities managed by their organization.

g. Vice President, Program Management Office, AJM-0, implements the requirements of this order into programs and activities managed by their organization.

h. Vice President, Technical Operations Services, AJW-0, implements the requirements of this order into the design and deployment of new systems as well as the modernization and/or refurbishment of existing NAS facilities; implements the requirements of this order into planning for lifecycle requirements; and ensures compliance with the requirements of this order by field organizations in AJW.

i. Service Area Directors for AJE, AJT, and AJW. The ATO Service Area Directors, or designees, implement the requirements of this order by field organizations.

j. Service Center Directors. The ATO Service Center Directors, or designees, assist the ATO Service Area Directors for AJE, AJT, and AJW in implementing the requirements of this order; and implement the requirements of this order into the processes for the planning of projects. Implementation support may include the formulation and review of budgets and requirements, and technical support on EOSH topics.

k. ATO Technical Operations Services, Air Traffic Control (ATC) Facilities, EOSH Services Group ensures EOSH requirements are incorporated into all new NAS systems in order to maximize employee safety, minimize negative impacts to the environment, and comply with federal regulations. EOSH Services ensures compliance with the requirements of this order for applicable activities.

l. **Engineering Services Managers, AJW,** implement the requirements of this order into the design and deployment of new systems as well as the modernization and/or refurbishment of existing NAS facilities and implement the requirements of this order into planning for lifecycle requirements.

m. **District Office Managers, AJW,** ensure compliance with the requirements of this order for applicable activities.

n. **Technical Support Center Managers, AJW,** ensure compliance with the requirements of this order for applicable activities.

1-8. Safety Risk Management. The FAA SMS requires that safety assessments be performed on changes to the NAS that have significant safety impact on aviation safety. The SMS does not address occupational safety (e.g., Occupational Safety and Health Administration (OSHA)). Instead, the SMS focuses on the broader topic of aviation safety and safe provision for air traffic control and navigation services. This order is subordinate to the SMS.

1-9. Requirements/Summary of Policy. This order is organized by life-cycle of the facility (design, establish, improve, maintain, decommission). The purpose of the order is to ensure that EOSH requirements are incorporated into both project planning and execution throughout the facility lifecycle.

a. **Planning.** Chapter 2 contains the requirements for the planning phase. Appropriate project planning for EOSH issues and requirements will reduce risks to FAA employee safety, and impacts on the environment. The requirements of this chapter will be carried out by the organization implementing the project (e.g., Engineering Services Managers for Engineering Services projects, national Program Offices for turnkey projects managed by Headquarters, and the appropriate front line manager for local projects).

b. **Design and Acquisition.** Chapter 3 contains the requirements for the design and acquisition phases. The chapter introduces aspects of sustainable design and affirmative procurement requirements for projects and programs. The requirements of this chapter will be carried out by the organization implementing the project (e.g., Engineering Services Managers for Engineering Services projects, national Program Offices for turnkey projects managed by Headquarters, and the appropriate front line manager for local projects).

c. **Construction.** Chapter 4 contains the requirements for the construction phase. The chapter outlines requirements for pre-construction coordination of EOSH issues, as well as EOSH considerations during construction. The requirements for construction safety and environmental issues during construction are the responsibility of the organization directly managing the project, with the assistance and coordination of EOSH professionals in their organization. The organization managing the project should coordinate with EOSH professionals in the Service Center, District Office, and/or the Safety and Environmental Compliance Manager (SECM) at the Technical Support Center.

d. Maintenance (In-Service Management). Chapter 5 contains the requirements for the maintenance phase. The requirements of this chapter will be carried out by the organization implementing maintenance.

e. Disposition. Chapter 6 contains the requirements for the disposition phase, which includes decommissioning and demolition. The requirements for safety and environmental issues during demolition or decommission are the responsibility of the organization directly managing the project, with the assistance and coordination of EOSH professionals in Engineering Services, the Service Center, District Office and/or the SECM at the Technical Support Center.

Chapter 2. Planning

2-1. Overview. The planning phase of a construction project must consider EOSH requirements relative to the risks to NAS operations. Early EOSH planning helps to manage possible issues over the lifecycle of the facility. Lifecycle engineering is part of project planning, and every project from conception through completion must include multidisciplinary EOSH expertise. Proper planning can reduce hazardous wastes and liability concerns, improve public and stakeholder perception, improve employee and contractor safety, and lessen overall costs to the FAA.

2-2. Responsibility. Engineering Services Managers ensure the requirements of this chapter are incorporated into all applicable projects managed by Engineering Services. For turnkey projects managed by Headquarters organizations, the national Program Office ensures that the requirements of this chapter are incorporated into their projects and ensures that sufficient resources are provided in terms of EOSH technical support. For non-Engineering Services projects managed exclusively by local facilities and/or field organizations, the appropriate manager (e.g., District Office Manager or System Support Center [SSC] Manager) ensures that the requirements of this chapter are incorporated into applicable projects (e.g., fence construction, painting, remodeling).

2-3. Project Planning.

a. EOSH Planning Requirements. The organization responsible for planning any construction, maintenance, or renovation project (e.g., national program office, District Office management) is required to consider potential EOSH issues. To that end, organizations planning projects may use the Project Planning EOSH Checklist, FAA Form 3900-16. The purpose of the checklist is to identify EOSH issues in the project that may impact the design, budget, and schedule. This form identifies program areas that may be subject to compliance obligations, as well as potential opportunities to minimize health and safety risk, and environmental impacts, such as waste generation, ecological degradation, energy consumption, and raw material consumption over the entire life of the project. The consequences of improper planning for EOSH requirements can be severe, including disruption of NAS operations, project delays, cost increases, and non-compliance with safety and environmental requirements. Non-compliance with EOSH requirements puts FAA employees and contractors at risk and exposes the agency to environmental risks and liability under OSHA regulations (29 CFR) and U.S. Environmental Protection Agency (EPA) regulations (40 CFR).

b. Elements of the Project Planning EOSH Checklist. During the planning stages of an engineering, construction, or maintenance project, the organization implementing the project must consider the potential EOSH hazards and risks in the various program areas listed below and discussed in FAA Form 3900-16, Project Planning EOSH Checklist. Organizations implementing projects must consider sensitive NAS operations and all facility occupants impacted by this project, as well as known or potential EOSH hazards. Any hazards identified in the Project Planning EOSH Checklist must be addressed through changes in the budget, schedule, or design of the project. Mitigation may include, but is not limited to, selection of alternative designs and/or sites, and budgeting for expected costs of hazardous material removal, environmental permitting, or other EOSH concerns.

c. EOSH Areas of Concern for Planning Review. The key EOSH requirements for planning, implementation, and oversight of projects at ATO facilities include the following:

Figure 2-1. EOSH Areas of Concern for Planning Review

Environmental Areas	Occupational Safety and Health Areas
Air Pollution	Construction Safety
Water Pollution	Hazard Communication
Drinking Water	Confined Space Entry
Hazardous Materials	Equipment and Tool Safety
Hazardous Waste	Working Conditions
Nonhazardous Solid Waste	Radiation
Fuel Storage Tank	Hazardous Energy
Polychlorinated Biphenyl (PCB)	Lead
Pesticides	Asbestos
Asbestos	Indoor Air Quality
Lead	Climbing, Walking, Working Surfaces
Radon	Employee Health Exposure
Natural Resources	Vehicle Safety
Cultural Resources	Respiratory Protection
Environmental Due Diligence Audits	Personal Protective Equipment
National Environmental Policy Act (NEPA)	Hearing Conservation
Environmental Cleanup/CERCLA	Fire Protection

2-4. Special Environmental Compliance Topics. The organization responsible for the siting and planning phase implements the following environmental processes as required by law, regulations, and FAA orders. The organization implementing the project must initiate the request for the following environmental processes with the appropriate EOSH professionals (i.e., Engineering Services EOSH Coordinator, SECM, or Program Office) as early as possible, and no later than at receipt of the project authorization. Compliance with the National Environmental Policy Act (NEPA) and environmental due diligence audit (EDDA) requirements may pose significant impacts on project design, budget, and schedule.

a. NEPA. NEPA requires federal agencies to systematically identify and evaluate potential environmental impacts associated with implementing major federal actions. The organization implementing the project must comply with NEPA and commence NEPA analysis and associated documentation in accordance with FAA Order 1050.1E, Environmental Impacts: Policies and Procedures. See FAA Order 1050.1E Paragraph 310, Categorical Exclusions for Facility Siting, Construction and Maintenance, for the list of categorical exclusions for FAA actions involving acquisition, repair, replacement, maintenance, or upgrading of grounds, infrastructure, buildings, structures, or facilities that generally are minor in nature. An action on the categorically excluded list is not automatically exempted from environmental review under NEPA. The responsible FAA official must also review FAA Order 1050.1E Paragraph 304, Extraordinary Circumstances, before finalizing a decision to categorically exclude a proposed action, or to proceed with an environmental assessment or an environmental impact statement.

b. Environmental Due Diligence Audit (EDDA). To minimize the FAA's liability during real property transfers (e.g., acquisitions, disposals, lease actions) and to comply with the requirements of the Community Environmental Response Facilitation Act (CERFA) and General Service

Administration (GSA) real property transfer requirements, ATO must determine the applicability of an EDDA when real property transfer is involved in project implementation. The organization implementing the project must determine need for an EDDA and commence EDDA documentation in accordance with FAA Order 1050.19B, Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions. See FAA Order 1050.19B Paragraph 1-9, Determining the Need for an EDDA, for more information on EDDA applicability.

Chapter 3. Design and Acquisition

3-1. Overview. EOSH requirements must be incorporated into the design and acquisition of new facilities and renovation of existing facilities. Identifying applicable EOSH requirements and possible areas for improvement provides opportunities to improve design and to be proactive in promoting sustainable design and buildings. Incorporating EOSH concerns into the design and acquisition processes allows more thorough application of requirements and provides more oversight of EOSH issues throughout the program lifecycle.

3-2. Responsibility. The organization implementing the project must incorporate the requirements of this chapter into applicable engineering, construction, or renovation projects. Engineering Services Managers ensure the requirements of this chapter are incorporated into all applicable projects managed by Engineering Services. For turnkey projects managed by Headquarters organizations, the national Program Office ensures that sufficient EOSH technical support resources are provided. For non-Engineering Services projects managed exclusively by local facilities and/or field organizations, the appropriate manager (e.g., District Office Manager or SSC Manager) ensures that the requirements of this chapter are incorporated into applicable projects (e.g., fence construction, painting, remodeling).

3-3. Design Phase. The organization implementing the project must review the following processes and incorporate them in order to improve project design:

a. FAA Form 3900-17, Design Risk Analysis EOSH Checklist. The design phase of a construction project must identify applicable EOSH considerations included in FAA Form 3900-17, the Design Risk Analysis EOSH Checklist.

b. Sustainability. It is required that projects incorporate the applicable requirements for sustainable design during the design stage of the project per Executive Orders 13423 and 13514. These orders set forth requirements for sustainability, including energy management, water conservation, sustainable design, and diversion of construction waste. The organization implementing the project should review the project for opportunities to incorporate Leadership in Energy and Environmental Design (LEED) enhancements. Appendix B is provided as resource tools to identify opportunities for enhancement of new construction and existing buildings. Other resources include the Whole Building Design Guide and the Guiding Principles for Federal Leadership in High Performance and Sustainable Buildings (see Paragraph 7-5).

3-4. Acquisition Phase. In the acquisition phase the following processes must be reviewed and applied as required:

a. Incorporate the results of the Design Risk Analysis EOSH Checklist into acquisition documents such as the market survey and screening information request (SIR). There are three categories of SIRs: qualification information, screening information, and request for offers. Each category of SIR is discussed in FAA Acquisition System Toolset (FAST) Acquisition Management Policy Section 3.2.2.3.1.2.1 (http://fast.faa.gov/).

b. Review project design submittals and/or other acquisition documents based on criteria established in Form 3900-17, Design Risk Analysis EOSH Checklist.

Chapter 4. Construction

4-1. Overview. The requirements in this chapter apply to all NAS construction activities with potential EOSH impacts to FAA employees/contractors and NAS operations. The purposes of these requirements are as follows: (1) safeguarding NAS operations from outages, (2) ensuring construction safety is enforced at work sites, (3) ensuring employees/contractors at FAA facilities are not exposed to hazards during construction, and (4) complying with environmental and safety and health regulations.

a. The construction phase of a project must address the EOSH considerations as identified in Form 3900-17, Design Risk Analysis EOSH Checklist, completed during the design phase.

b. The organization that directly manages the construction project is responsible for evaluating the potential EOSH impact to NAS operations, reviewing site-specific procedures and project management plans, identifying potential hazards, ensuring measures and controls address applicable hazards, conducting site inspections, and ensuring the application, submittal, and compliance with all permits.

4-2. Responsibility. Engineering Services Managers must ensure requirements in this chapter are incorporated into all applicable projects. Turnkey projects managed by national Program Offices at Headquarters organizations must ensure requirements in this chapter are incorporated and that sufficient EOSH technical support resources are provided. For projects managed directly by the District Office and field organizations other than Engineering Services (or projects not managed by Engineering Services and not turnkey projects), it is the responsibility of front line manager or supervisor (e.g., District Office Manager) to ensure the requirements of this chapter are applied to those projects.

4-3. Pre-Construction EOSH Checklist.

a. The organization that directly manages the construction project is responsible for completing the FAA Form 3900-18, Pre-Construction EOSH Checklist, and coordinating with the appropriate District Office prior to commencement of the project. Actual work on the project (i.e., construction) may not be initiated prior to completion and review of FAA Form 3900-18. In most cases, the organization directly managing the day-to-day activities in a construction project will be outside FAA Headquarters (e.g., Service Area Engineering Services, District Office, or Field Maintenance Program). If an FAA Headquarters office directly manages a construction project, it will need to coordinate the completion of the checklist with the District Office.

b. FAA Form 3900-18 is a tool used by each Resident Engineer (RE), Contracting Officer's Technical Representative (COTR), designated facility point of contact, or District Office Manager who oversees construction and maintenance activities that potentially have EOSH impacts on NAS operations. This checklist should be used, as appropriate, during critical phases of construction and maintenance activities (e.g., the pre-construction meeting, 30-60 days prior to commencement of work, daily/weekly construction meetings). Emphasis should be placed on using the checklist as a tool to assess, as well as reassess, hazards as the project progresses. The checklist contains detailed instructions regarding its use. Prior to starting a construction project, the organization directly

managing the day-to-day activities of the project will complete FAA Form 3900-18 Section B, Work Summary Information. The intent of Section B is to provide a description of the construction project and identify key personnel responsible for project completion. After completing Section B, the organization directly managing the day-to-day activities in the construction project and/or maintenance tasks will fax/mail/e-mail/deliver the checklist to the District Office Manager or designee.

c. The District Office Manager or designee will complete Section C of the checklist, Evaluation. The intent of Section C is to allow the District Office Manager to determine whether the remainder of the checklist needs to be completed by the organization directly managing the day-to-day activities in the construction project. If necessary, the District Office Manager or designee shall be provided any additional information regarding the project that will facilitate their determination on whether the remainder of the checklist should be completed.

d. The remainder of the checklist shall be completed by the organization directing the construction project. Completion of the checklist will require further coordination between the District Office and the organization directly managing the day-to-day activities in the construction project. The checklist shall not be considered complete until the District Office Manager or designee signs in Section H of the checklist. Therefore it is the responsibility of the organization managing the day-to-day activities of the construction project to ensure that the checklist is complete with the District Office approval. The organization directing the project will also ensure that the District Office is provided a copy of the completed checklist.

e. A copy of the completed checklist shall be kept on file electronically or in hard copy at the District Office in which the work was accomplished for a minimum of two years after the construction is completed. A copy of the completed checklist shall be forwarded in accordance with the distribution list on the checklist. As appropriate, each RE, COTR, District Office Manager, or designated facility point-of-contact is responsible for distribution of the checklist.

4-4. Permits. Develop and submit the following permits, if applicable:

a. Asbestos Work Permit. FAA Order 1050.20A, Airway Facilities Asbestos Control Program, requires a work permit for construction activities impacting asbestos containing material. The checklist contained in this order does not replace the permit requirement in Order 1050.20A.

b. Confined Space Permit. See FAA Order 3900.19B, Chapter 11, Confined Space Entry Program.

c. Energized Electrical Work Permit. See FAA Order 3900.19B, Chapter 34, Electrical Safety. An Energized Electrical Work Permit is a requirement as per National Fire Protection Association (NFPA) 70E, Article 110.8(B)(2), and Article 130.1(B).

d. Hot Work Permit. See FAA Order 3900.19B, Chapter 26, Industrial Technology.

e. Environmental Permits. FAA Order 1050.10C requires that all FAA facilities be designed, constructed, managed, operated, maintained and decommissioned to conform to applicable pollution

control statutes (e.g., Clean Air Act, Clean Water Act). Some of the pollution control statutes require permits, such as the following:

(1) Air pollution control;
(2) Fuel storage tank notification and state permits;
(3) Local fire marshal notification for bulk flammable/combustible/reactive liquids;
(4) PCB management;
(5) Nuclear Regulatory Commission license for radioactive materials;
(6) Permits for connections to municipal drinking water lines, sewer connections;
(7) Sediment control and storm water management; and
(8) Wastewater pretreatment.

4-5. Resident Engineer EOSH Checklist. The purpose of the Resident Engineer EOSH Checklist is to ensure adherence to construction safety requirements at the construction site. It must be noted that contractors are responsible for ensuring the safety of their employees. The checklist does not release the contractors of this responsibility. The checklist may be used by the RE as a tool to support their oversight role. The checklist may be completed at the time of the pre-construction conference and reviewed and updated as the project proceeds. EOSH risks associated with each construction project vary considerably. Some projects are small in scope and present relatively few EOSH risks, while others are more complex and offer a variety of EOSH risks. The RE will assess the risks associated with construction projects at NAS facilities and based on their risk assessment, determine the need to apply the Resident Engineer Construction Safety Checklist. The Checklist may also be used by others in the construction process, including the project engineer or representatives from parties involved in construction.

4-6. Deliverables. As part of project management, ensure that the following deliverables, if applicable, are provided to the District Office in addition to documents required for the Joint Acceptance Inspection (JAI). Development of deliverables is the responsibility of the organization directly managing the project. It is anticipated that the completion of the deliverables may be done through a collaboration between several groups, including contractors, facility personnel, EOSH personnel, and Engineering Services staff.

a. Written lockout/tagout (LOTO) procedures.
b. Fall protection procedures and equipment.
c. Occupant Emergency Plans.
d. Material Safety Data Sheets (MSDS) for hazardous materials.
e. Hazardous material storage lockers (e.g., flammables cabinets).
f. Hazardous material spill kits.
g. Air pollution permits.
h. Fuel storage tank (FST) permits.
i. National Pollutant Discharge Elimination System (NPDES) permits.
j. Spill Prevention, Control, and Countermeasure (SPCC) Plan.
k. Other permits as necessary (e.g., hot work permit, asbestos permit).
l. Test certifications and documents (e.g., fire life safety system).
m. Training and information on systems as necessary (e.g., fire life safety system).
n. Documentation of asbestos-free construction as per FAA Order 1050.20A.

o. Arc Flash Hazard Analysis in accordance with FAA Order 3900.19B, Chapter 34, Electrical Safety.

p. Job Hazard Analysis (JHA) for the system, facility, and/or equipment being deployed as per 29 CFR §1910.132(d) and FAA Order 3900.19B, Chapter 23, Job Hazard Analysis. The JHA will analyze the employee safety hazards associated with the system, facility, and/or equipment and associated maintenance tasks.

Chapter 5. Maintenance

5-1. Overview. Numerous maintenance activities are performed at NAS facilities every day. These activities include preventive maintenance, corrective maintenance, facility modifications, and equipment modifications. Each of these maintenance activities may pose EOSH risks.

a. The purpose of this chapter is to provide guidance to prioritize the indoor air quality risks associated with those maintenance activities and provide guidance to manage the highest priority risks.

b. Chapter 4 addresses construction projects. Large-scale maintenance projects are essentially construction projects. The requirements of Chapter 4 may be applicable to the following large-scale maintenance tasks:

(1) Tasks that involve construction activities such as, but not limited to road grading, tree removal, pesticide application, equipment installation, and facility infrastructure modifications (e.g., roofing repairs).

(2) Activities in an air traffic control area that require the use of hazardous material (e.g., paint, solvent) or activities that may impact a hazardous material such as asbestos.

c. This chapter addresses indoor air quality risks specifically. The Resident Engineer EOSH Checklist (FAA Form 3900-19) may be used to account for and manage other EOSH risks related to maintenance projects.

5-2. Responsibility. District Office Managers ensure the requirements of this chapter are incorporated into all applicable projects.

5-3. Facility Risk Prioritization. Based on the volume and complexity of air traffic control operations, the following prioritization will be used for NAS facilities in terms of managing indoor air quality risks during facility maintenance:

a. Air Route Traffic Control Center (ARTCC).
b. Terminal Radar Approach Control (TRACON).
c. Airport Traffic Control Tower (ATCT).
d. Other staffed NAS facilities.
e. Unstaffed NAS facilities.

5-4. Activity Risk Prioritization. In terms of maintenance activities, the following scheme will be used for prioritization:

a. Maintenance activities involving the facility's heating, ventilation, and air conditioning (HVAC) system.
b. Maintenance activities involving the use of volatile materials (such as paints and solvents).
c. Maintenance activities involving welding or brazing inside NAS facilities.
d. Maintenance activities involving cutting, grinding, and demolition inside NAS facilities.

Table 5.1. Prioritization of Indoor Air Quality Risks for Maintenance Projects at NAS Facilities

Maintenance project involving:	ARTCC	TRACON	ATCT	Staffed NAS Facility	Unstaffed NAS Facility
Facility's HVAC system	High	High	High	Moderate	Low
Volatile materials (paints, solvents, roofing sealants, herbicides)	High	High	High	Moderate	Low
Welding or brazing	High	High	Moderate	Moderate	Low
Cutting, grinding, or demolition	High	High	Moderate	Moderate	Low

5-5. Pre-Maintenance EOSH Checklist. Table 5.1 presents a basic prioritization for indoor air quality risks associated with maintenance projects at NAS facilities. The risks associated with each maintenance task are unique, and should be addressed accordingly. FAA Form 3900-20 is the Pre-Maintenance EOSH Checklist. The District Office Manager and/or their designee should rely on technical guidance provided by the SECM at the Technical Support Center to assess the risks associated with maintenance projects in their NAS facilities, and based on their risk assessment, determine the need to apply the Pre-Maintenance EOSH Checklist. The Pre-Maintenance EOSH Checklist may not necessarily apply to all maintenance activities, but should be used to manage activities with the highest risk.

Chapter 6. Decommissioning and Disposition

6-1. Overview. The decommissioning phase of a NAS facility must include applicable EOSH considerations identified in the Project Planning EOSH Checklist (refer to FAA Form 3900-16). This checklist identifies compliance obligations and project planning issues to minimize waste generation, health and safety impacts, ecological degradation, and raw material consumption over the entire lifecycle of the project. In addition, this checklist is designed to correctly identify and highlight EOSH cost considerations and impacts to the project. Proper planning will result in a reduction of hazardous wastes, reduced liability concerns, improved public and stakeholder perception, improved employee and contractor safety and less cost to the FAA.

6-2. Responsibility.

a. National Program Offices, as part of pre-deployment planning provisions in the AMS, are required to complete an In Service Review (ISR) checklist. The ISR checklist and FAA Order 4600.27A, Personal Property Management, requires that a disposition plan be developed for personal property that will be disposed as a result of new NAS system installation.

b. Manager, Engineering Services, ensures the requirements of this chapter are incorporated into all applicable projects managed by Engineering Services. For turnkey projects managed by Headquarters organizations, the national Program Office ensures that the requirements of this chapter are incorporated into their projects and ensures that sufficient EOSH technical support resources are provided.

c. District Office Managers ensure the requirements of this chapter are incorporated into all applicable projects (i.e., projects planned and executed at the local level).

6-3. Real Property. For decommissioning projects involving real property, the following processes must be reviewed for applicability and, if applicable, completed:

a. NEPA. Comply with NEPA and complete appropriate NEPA requirements prior to commencing actions, in accordance with FAA Order 1050.1E, Environmental Impacts: Policies and Procedures. See Paragraph 310, Categorical Exclusions for Facility Siting, Construction and Maintenance.

b. EDDA. Determine need for an EDDA and commence EDDA documentation in accordance with FAA Order 1050.19B, Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions. The order also briefly describes compliance with disclosure and reporting requirements of 40 CFR Part 373 and the Federal Management Regulation (FMR) applicable to the selling, transferring, or disposal of federal real property. The disclosure and reporting requirements may be included as part of the EDDA documentation.

c. Asbestos. Comply with FAA Order 1050.20A, Airway Facilities Asbestos Control, and review demolition projects regarding impact to asbestos-containing material.

d. Other environmental considerations. Comply with FAA Orders regarding environmental and hazardous materials considerations in facility decommissioning and disposition, including Order 1050.12, Order 1050.16, 1050.17, Order 1050.19B, and Order 1050.20.

6-4. Reutilization and Disposition of Personal Property. Unrequired or excess FAA personal property will be utilized or disposed in compliance with FAA Order 4600.27A, Personal Property Management.

a. Many FAA systems and equipment are unique and serve no practical purpose to other entities, and may endanger NAS integrity if used outside the NAS. Under the provisions of Title 49, United States Code, Section 4011(c)(2)(F), the FAA is exempted from the provisions of the FMR regarding the disposition of FAA airport, airway systems, or technical equipment with the capacity to transmit across NAS-controlled airway frequencies. Implementation of this authority is delegated to AJW. All NAS systems require a reutilization and disposition plan.

b. Specific guidance resources regarding personal property are listed below.

(1) FAA Order 4600.27A, Personal Property Management.

(2) FAA Order 1050.20A, Airway Facilities Asbestos Control Program, requires pre-construction asbestos surveys (including demolition and renovation).

(3) For NAS systems, the approved reutilization and disposition plan.

(4) FMR, 41 CFR Part 102, Subpart B. Specific additional requirements regarding certification apply to materials that meet the definition of "hazardous personal property" (see 41 CFR §102-36.40). Specifically, 41 CFR §102-36.425 requires that executive agencies dispose of excess hazardous property in accordance with 41 CFR Part 101-42.

(5) ATO Logistics Personal Property Management Bulletin PPB 11-01, of December 2010, Compliant Disposal of Electronic Equipment.

(6) AMS Policy

(7) Exhibit 300 Program Baseline (OMB Circular A-11).

Chapter 7. Administrative Information

7-1. Distribution. This order is distributed to all Technical Operations field offices with a standard distribution.

7-2. Background.

a. The FAA ATO is responsible for managing myriad aspects of NAS operations, from constructing new facilities to controlling air traffic to maintaining the NAS infrastructure. The employees of the ATO are service providers—the 38,000 controllers, technicians, engineers, and support personnel whose daily efforts keep air traffic moving. ATO's mission is to safeguard NAS operations, while ensuring the safety of its employees and minimizing its impact on the environment.

b. This order revises and updates a previous order, 3900.57, which laid out a checklist for pre-construction coordination of EOSH issues. This order designates responsibilities and opportunities for organizations involved in the lifecycle of ATO facilities to address EOSH issues.

c. Numerous organizations in the FAA fund, plan, design, and manage activities throughout the NAS facility life cycle. These organizations are responsible for properly planning and coordinating construction activities to minimize EOSH risks to FAA employees and NAS operations.

7-3. Authority to Change This Order.

a. ATO. The ATO has the authority to add new chapters, or change existing chapters that are proposed by organizational elements of FAA after appropriate coordination with internal stakeholder organizations. The COO has the right to further delegate this authority.

b. FAA Organizational Elements. Changes proposed by an organizational element within the FAA must be submitted to the ATO, EOSH Services, AJW-23, who will evaluate, or assign a designee to evaluate, the changes for incorporation. When using this order, all organizations are encouraged to assess its effectiveness and usefulness. Organizations should provide feedback regarding the effectiveness and usefulness of the order to EOSH Services, AJW-23, through memorandum or electronic mail. FAA Form 1320-19, Directive Feedback Information, may also be used.

7-4. Acronyms and Definitions. A list of acronyms is provided in Appendix A.

7-5. Related Publications.

a. Guiding Principles. The Memorandum of Understanding entitled Federal Leadership in High Performance and Sustainable Buildings (January 2006), http://www.wbdg.org/sustainableEO/mou.php, defines guiding principles for agency policy The guiding principles are as follows:

(1) Employ Integrated Design Principles;

(2) Optimize Energy Performance;
(3) Protect and Conserve Water;
(4) Enhance Indoor Environmental Quality;
(5) Reduce Environmental Impact of Materials.

b. Whole Building Design Guide is a web-based portal, http://www.wbdg.org/, providing government and industry practitioners with one-stop access to up-to-date information on a wide range of building-related guidance, criteria and technology from a 'whole buildings' perspective. The portal is organized into the following major categories:

(1) Design guidance;
(2) Project planning, management, and delivery;
(3) Facilities operations and maintenance;
(4) Documents and references;
(5) Tools;
(6) Continuing education;
(7) Building Information Modeling; and
(8) Applied research.

c. Executive Orders 13423 and 13514 establish requirements for sustainability and affirmative purchasing for Federal agencies. The requirements in these Executive Orders establish targets for environmentally preferable purchasing, recycling, and other environmental requirements.

d. Energy Policy Act of 2005 (EPAct 2005) establishes requirements for energy management and affirmative procurement for federal agencies.

e. Energy Independence and Security Act of 2007 (EISA 2007) lays out further reduction goals for energy use at federal buildings and specifies standards for high-performance buildings, procurement of energy efficient products, and reporting on energy costs, energy efficiency, and greenhouse gas emissions.

f. LEED Rating Systems. See Appendix B, Summary of LEED Criteria for New Construction and Existing Buildings, for more information on LEED rating systems.

g. FAA Orders. You can find an electronic copy of FAA Orders on the DMS website: https://employees.faa.gov/tools_resources/orders_notices/. The FAA Orders referenced in this order are listed below.

(1) FAA Order 1050.1E, Policies and Procedures for Considering Environmental Impacts.

(2) FAA Order 1050.10C, Prevention, Control and Abatement of Environmental Pollution at FAA Facilities.

(3) FAA Order 1050.12, Application of Nonrestricted and Restricted Use Pesticides

(4) FAA Order 1050.15A, Fuel Storage Tanks at FAA Facilities.

(5) FAA Order 1050.16, Implementation Guidelines for Compliance with Underground Storage Tanks

(6) FAA Order 1050.17, Airway Facilities Environmental and Safety Compliance Program.

(7) FAA Order 1050.19B, Environmental Due Diligence Audits in the Conduct of FAA Real Property Transactions.

(8) FAA Order 1050.20A, Airway Facilities Asbestos Control Program.

(9) FAA Order 3900.19B, FAA Occupational Safety and Health Program.

(10) FAA Order JO 3900.63, ATO Fall Protection Program.

(11) FAA Order 4600.27A, Personal Property Management.

(12) FAA Order 6000.54, Airway Facilities Hazard Communication Program.

h. Federal Regulations. The Code of Federal Regulations (CFR) specifies applicable standards and requirements for federal agencies. Applicable sections include, but are not limited to: 29 CFR Parts 1910 and 1926, 40 CFR Parts 1 - 1299, and 49 CFR Parts 171 - 180, and other applicable regulations mentioned in this and other orders.

7-6. Forms and Checklists. The following forms are provided to supplement this directive. Document retention is described below. The forms are available on the FAA Forms website at www.faa.gov/forms.

a. Project Planning EOSH Checklist (FAA Form 3900-16). The Project Planning EOSH Checklist is for use when reviewing plans/projects during the initial conceptual stage of planning for a project. It is intended to identify environmental and safety issues in the project that may impact the design, budget, and schedule. Retain as desired, checklist is not mandatory.

b. Design Risk Analysis EOSH Checklist (FAA Form 3900-17). This checklist is intended to be used as a tool by the Project Engineer and/or Program Manager to identify and fully characterize areas that may potentially have EOSH related impacts to FAA projects. Retain a copy with project engineering documents, as necessary, through the duration of the project, in electronic or hard copy.

c. Pre-Construction EOSH Checklist (FAA Form 3900-18). This checklist is intended to review construction, installation and non-routine maintenance activities, prior to commencement, that potentially have occupational safety and health related impacts on NAS operations and employees. Retain a copy with project engineering documents, as necessary, through the duration of the project, in electronic or hard copy.

d. Resident Engineer EOSH Checklist (FAA Form 3900-19). This checklist is intended to be used as a tool by the RE to ensure adherence to construction safety requirements at the FAA

contractor site. It must be noted that contractors are responsible for ensuring the safety of their employees. The checklist may be used by the RE as a tool to support their oversight role at the construction site. This is a voluntary checklist. If used during a project, retain a copy with project engineering documents.

e. Pre-Maintenance EOSH Checklist (FAA Form 3900-20). This checklist is intended to be used as a tool by those who design, review and/or oversee maintenance activities that have potential airborne contaminant impacts on NAS operations. This tool should be used, as appropriate, during design and review phases of construction and maintenance activities. Maintain a copy in the Facility Data File, as appropriate.

Appendix A. Acronym List

ABU	Office of Budget
ACM	Asbestos-Containing Material
AGC	Office of the Chief Counsel
AMS	Acquisition Management System
APP	Office of Airport Planning and Programming
ARTCC	Air Route Traffic Control Center
AST	Aboveground Storage Tank
ATCT	Airport Traffic Control Tower
ATO	Air Traffic Organization
BACT	Best Available Control Technology
CAA	Clean Air Act
CERFA	Community Environmental Response Facilitation Act
CFC	Chlorofluorocarbon
CFR	Code of Federal Regulations
COTR	Contracting Officer's Technical Representative
DMS	Directives Management System
EDDA	Environmental Due Diligence Audit
EOSH	Environmental and Occupational Safety and Health
EPA	U.S. Environmental Protection Agency
FAST	FAA Acquisition System Toolset
FMR	Federal Management Regulation
FST	Fuel Storage Tank
GSA	General Service Administration
HVAC	Heating, Ventilation, and Air Conditioning
IIPP	Injury and Illness Prevention Program
ISR	In Service Review
JAI	Joint Acceptance Inspection
JHA	Job Hazard Analysis
LEED	Leadership in Energy and Environmental Design
LOTO	Lockout/Tagout
MSDS	Material Safety Data Sheet
NAS	National Airspace System
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NPDES	National Pollutant Discharge Elimination System
OSHA	Occupational Safety and Health Administration

O&M	Operations and Maintenance
PACM	Presumed Asbestos-Containing Material
PCB	Polychlorinated Biphenyl
PPB	Personal Property Bulletin
PPE	Personal Protective Equipment
RE	Resident Engineer
SECM	Safety and Environmental Compliance Manager
SIR	Screening Information Request
SMS	Safety Management System
SPCC	Spill Prevention, Control, and Countermeasure
TRACON	Terminal Radar Approach Control
TWA	Time Weighted Average
UBC	Universal Building Code
UFC	Universal Fire Code
UST	Underground Storage Tank

Appendix B. Summary of LEED Criteria for New Construction and Existing Buildings

1. **LEED Rating Systems**. The Leadership in Energy and Environmental Design (LEED) Green Building Rating System™ is a voluntary, consensus-based standard to support and certify successful green building design, construction and operations as developed by the U.S. Green Building Council, http://www.usgbc.org, in 2000. LEED is a tool for buildings of all types and size. LEED certification offers third party validation of a project's green features and verifies that the building is operating exactly the way it was designed to.

2. **LEED Rating Systems**. LEED Green Building Rating Systems have been developed for the following:
   (1) New Construction
   (2) Existing Buildings: Operations & Maintenance
   (3) Commercial Interiors
   (4) Core & Shell
   (5) Schools
   (6) Retail
   (7) Healthcare
   (8) Homes
   (9) Neighborhood Development.

3. **LEED for New Construction**

a. The LEED for New Construction Rating System is designed to guide and distinguish high-performance commercial and institutional projects, including office buildings, high-rise residential buildings, government buildings, recreational facilities, manufacturing plants and laboratories.

b. LEED is a point based system where projects earn LEED points for satisfying specific green building criteria. Within each of the seven LEED credit categories, projects must satisfy particular prerequisites and earn points. The seven categories include (110 points maximum):
   (1) Sustainable Sites (SS) (26 points)
   (2) Water Efficiency (WE) (10 points)
   (3) Energy & Atmosphere (EA) (35 points)
   (4) Materials & Resources (MR) (14 points)
   (5) Indoor Environmental Quality (EQ) (15 points)
   (6) Innovation & Design Process (ID) (6 points)
   (7) Regional Priority Credits (RP) (4 points).

4. **LEED for Existing Buildings: Operations & Maintenance**

a. LEED for Existing Buildings: O&M is the revised tool for the ongoing operations and maintenance of existing buildings. The rating system identifies and rewards current best practices and provides an outline for building's to use less energy, water and natural resources; improve the indoor environment; and uncover operating inefficiencies.

b. The intent of LEED for Existing Buildings: O&M is to certify the operations and maintenance of the building and create a plan for ensuring high performance over time. The rating system captures both a building's physical systems (equipment, design, land use, etc.) and the way the building is occupied and operated by its managers (waste management, temperature monitoring, commuting programs, etc.). LEED for Existing Buildings addresses whole-building cleaning and maintenance issues (including chemical use), recycling programs, exterior maintenance programs, and systems upgrades.

c. LEED for Existing Buildings: O&M can be applied both to existing buildings seeking LEED certification for the first time and to projects previously certified under LEED for New Construction or Core & Shell. It requires buildings to be at least two years old before certifying. Buildings less than two years old can register projects and begin the performance period for certification, but will not be certified until two years have elapsed.

d. LEED is a point based system where projects earn LEED points for satisfying specific green building criteria. Within each of the seven LEED credit categories, projects must satisfy particular prerequisites and earn points. The seven categories include (110 points maximum):

(1) Sustainable Sites (SS) (26 points)
(2) Water Efficiency (WE) (14 points)
(3) Energy & Atmosphere (EA) (35 points)
(4) Materials & Resources (MR) (10 points)
(5) Indoor Environmental Quality (EQ) (15 points)
(6) Innovation in Operation (IO) (6 points)
(7) Regional Priority Credits (RP) (4 points).