

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

AIR FORCE POLICY DIRECTIVE 90-8

14 MARCH 2017



Special Management

***ENVIRONMENT, SAFETY &
OCCUPATIONAL HEALTH
MANAGEMENT AND RISK
MANAGEMENT***

COMPLIANCE WITH THE PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available for downloading or ordering on the e-publishing website at <http://www.e-publishing.af.mil>.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: SAF/IEE

Certified by: SAF/IE
(Hon. Miranda A. A. Ballentine)

Supersedes: AFPD90-8, 2 February 2012

Pages: 13

This Air Force Policy Directive (AFPD) implements Department of Defense Directive (DoDD) 4715.1E, *Environment, Safety, and Occupational Health (ESOH)*, DoD Instruction (DoDI), 4715.17, *Environmental Management Systems*, DoDI 4715.18, *Emerging Contaminants (ECs)*, DoDI 6055.01, *DoD Safety and Occupational Health (SOH) Program*, and in accordance with Headquarters Air Force Mission Directive (HAF MD) 1-18, *Assistant Secretary of the Air Force (Installations, Environment, and Energy)*. This AFPD requires the Air Force (AF) to reference consensus standards as guides to assist in establishing effective management systems: ANSI Z10, *American National Standard—Occupational Health and Safety Management Systems*, and ISO 14000 Standards, *Environmental Management Systems*. This Directive establishes AF policy for Environment, Safety and Occupational Health (ESOH) and Risk Management (RM) Programs. This Policy Directive applies to all AF personnel, Reserve, the Air National Guard (ANG), and all AF operations. In instances where the AF, Air Force Reserve, or ANG organizations and personnel are tenants to a non-Air Force organization, those personnel will also follow the policies, directives, and requirements identified in applicable and enforceable agreements in accordance with (IAW) DoDI 4000.19, *Support Agreements* and AFPD 25-2, *Intra-service Support Agreements*. This AFPD may not be supplemented at any level per AFPD 90-1, *Policy Formulation*, and AFI 33-360, *Publications and Forms Management*. Ensure that all records created as a result of processes prescribed in this publication are maintained IAW Air Force Manual (AFMAN) 33-363, *Management of Records*, and disposed of IAW the AF Records Disposition Schedule (RDS) in the Air Force Records Information Management System (AFRIMS). Recommended changes and conflicts between this and other publications shall be

referred to SAF/IEE, 1665 Air Force Pentagon, Washington, DC 20330-1665, safiee.workflow@pentagon.af.mil, on AF Form 847, *Recommendation for Change of Publication*.

SUMMARY OF CHANGES

This document has only minor administrative changes that include combining two PDs into one. This AFPD establishes the AF ESOH priorities of compliance, risk management, and continuous improvement. It updates office symbols and incorporates provisions of DoDD 4715.1E, DoDI 4715.17, DoDI 4715.18, DoDI 6055.01, and HAF MD 1-18.

1. Overview. This AFPD defines and establishes AF policy for ESOH and RM programs. It directs the ESOH functional offices to implement guidance across the enterprise. Additionally, this AFPD directs the development of management systems as related to ESOH mission and personal risk activities. The management process provides leaders with a method to ensure proper program oversight and to achieve goals and objectives related to all ESOH requirements. The process also empowers Airmen to make good RM decisions in their daily activities, both on and off duty.

2. Policy. ESOH priorities include compliance, risk management, and continuous improvement. Policy elements will be established in accordance with Attachment 3.

Section 2A--Compliance

2.1. Ensure compliance with applicable federal, state, local, DoD and AF ESOH statutes, policies, guidance, and regulations.

2.2. Assign the core mission areas the authority, responsibility, and accountability for compliance with applicable ESOH requirements. For overseas areas, ensure compliance with the ESOH provisions of applicable treaties, international law, bilateral and multi-national agreements [e.g., Status of Forces Agreements (SOFA)], country specific Final Governing Standards (FGS), or in countries where no FGS exist, the Overseas Environmental Baseline Guidance Document (OEBGD), Unified Combatant Command, Major Command (MAJCOM), and installation-specific requirements.

2.3. Fund ESOH legal obligations to include infrastructure requirements critical to ESOH compliance.

Section 2B—Risk Management

2.4. Commanders/Directors shall provide safe and healthy workplaces and conduct training and real world operations in a manner that enhances mission effectiveness, preserves resources, prevents pollution, and minimizes ESOH risks to AF personnel and the public both on and off the installation.

2.4.1. Enhance mission effectiveness at all levels, while preserving assets and safeguarding health and welfare.

2.4.2. Preserve resources by identifying opportunities to increase war fighting effectiveness in all environments at minimal cost.

2.4.3. Control/mitigate pollution in the air, water, and soil that may cause undue exposure to hazardous chemical, physical, and biological agents.

2.4.4. Minimize risk to the lowest acceptable level.

2.4.4.1. The most logical choices for accomplishing a mission are those that meet all requirements while exposing personnel and resources to the lowest acceptable risk.

2.4.4.2. Integrate RM into mission and activity planning processes, ensuring decisions are based upon assessments of risk integral to the activity and mission.

2.4.4.3. Make risk decisions at the appropriate level; one that can allocate the resources to reduce the risk or eliminate the hazard and implement controls.

2.4.5. Promote safety, health, and environmental stewardship by minimizing ESOH risks through creating a cultural mindset in which every leader and Airman is trained and motivated to manage risk during all on and off duty activities.

2.5. The AF RM process consist of the following five primary steps: (1) Identify the Hazards, (2) Assess the Hazards, (3) Develop Controls and Make Decisions, (4) Implement Controls, (5) Supervise and Evaluate corrective actions.

2.5.1. Apply the process cyclically and continuously across the full spectrum of military training, operations, and day-to-day activities both on and off duty.

2.5.2. Apply RM during all aspects of preparing, developing, testing, planning, organizing, training, equipping, sustaining, and employing forces across the conflict continuum of peace and war.

2.6. Life Cycle Risk Management (LCRM) and Integrated Life Cycle Management (ILCM):

2.6.1. LCRM is based on the same general principles as AF RM. The key elements of LCRM is described in AFI 63-101/20-101, *Integrated Life Cycle Management*, AFPAM 63-128, *Integrated Life Cycle Management*, and DoDI 5000.02, *Operation of Defense Acquisition Systems*.

2.6.2. ILCM mission assurance and ESOH risks are assessed and managed using MIL-STD-882, *the DoD Standard Practice for System Safety*. All high and serious ESOH risks must also be translated and presented on the standard LCRM 5X5 matrix IAW AFI 63-101/20-101.

2.6.3. When a system is fielded, risk data developed through the program's LCRM and MIL-STD-882 process should be provided to system users and should inform the users of operational and ESOH RM efforts.

Section 2C—Continuous Improvement

2.7. Ensure ESOH programs in collaboration with other AF efficiency efforts focus on mission accomplishment, enable employee involvement, and foster a culture of continuous improvement.

2.8. Every Airman must constantly seek to minimize ESOH risks and to improve execution of the AF mission.

Section 2D—Management Systems

2.9. ESOH Management System policy requires the use of accepted management system principles and meets the performance elements. Management elements will be established in accordance with Attachment 2. Three complementary, but separate, management systems are currently used to support the ESOH program.

2.10. Implement information management systems to support all ESOH programs. Each functional agency should work towards automating all aspects of their ESOH information management system. ESOH management systems should be automated such that data streams can be shared to enhance the performance of ESOH capabilities through cross-functional analysis and potential interdisciplinary hazard abatement actions.

2.11. Where the individual systems overlap, programs shall be combined for maximum performance and optimization of resources.

2.12. Commanders will maintain a prioritized abatement listing which uses Abatement Priority Numbers (APN) for each SOH and Fire Risk Assessment Code (RACs) 1, 2, or 3 IAW DoDI 6055.01. The APN rank orders SOH and Fire risks/vulnerabilities and allows the commander to make informed decisions.

2.13. Maintain readiness by providing access to adequate natural infrastructure (NI), such as air, land, water, flora, and fauna assets, to support mission accomplishment. To accomplish this objective, NI shall be assessed and managed to ensure these assets have the capacity to meet current and future mission needs.

2.14. Where appropriate, encourage and enable Commanders/Directors to seek ESOH management system recognition under the OSHA Voluntary Protection Programs.

3. Responsibilities.

3.1. Assistant Secretary for Installations, Environment, and Energy (SAF/IE) will:

3.1.1. Develop and maintain policy, for Secretary of the Air Force (SECAF) approval, and provide oversight for all AF ESOH program performance IAW HAF MD 1-18, *Assistant Secretary of the Air Force (Installations, Environment, and Energy)*.

3.1.1.1. Assign policy and program domains, provide guidance, direction and oversight for all matters to the formulation, review, and execution of plans, policies, programs, budgets, and AF positions regarding federal and state legislation and regulations within his/her area of responsibility.

3.1.2. Implement and direct an ESOH program and management system to maintain readiness and support mission, pursuant to DoDD 4715.1E.

3.1.2.1. Identify AF enterprise-wide ESOH program shortfalls and advocate for resources through the AF Corporate Structure.

3.1.2.2. Report AF ESOH program performance to SECAF, Chief of Staff United States Air Force (CSAF), and to the Assistant Secretary of Defense for Energy, Installations, and Environment (ASD (EI&E)).

3.1.3. Serve as the AF Designated Agency Safety and Health Official (DASHO).

3.1.3.1. Establish safety and occupational health programs designed to apply RM principles and eliminate accidents, deaths, and occupational illnesses, pursuant to DoDI 6055.01.

3.2. Assistant Secretary of the Air Force for Acquisition (SAF/AQ) will:

3.2.1. Integrate ESOH considerations into acquisition policies, instructions, program reviews, and training, as appropriate.

3.2.2. Ensure acquisition program managers employs the system safety RM standard practice methodologies identified in paragraph 2.6 to identify, assess, and mitigate ESOH risks and to lower total ownership (life-cycle) costs when developing new systems or modifying existing systems.

3.2.3. Include ESOH requirements as a mandatory element for all applicable acquisition program reviews. Each program review must address the following topics whenever possible: (1) status of identified system high and serious ESOH risks; (2) the National Environmental Policy Act/Executive Order 12114 compliance schedule; and (3) system mishap trends and mitigation measures since the last program review.

3.2.4. Develop policy and guidelines that require government environmental, safety, and occupational health offices' coordination of contract documentation to consider including ESOH requirements in: (1) performance-based requirements; (2) past performance evaluations for best value contracting; (3) source selection criteria; (4) contractor performance assessment plans; (5) award fee components; and (6) contract close-out options.

3.3. Deputy Chief of Staff, Manpower, Personnel, and Services (AF/A1) will:

3.3.1. Develop and maintain policy, for SECAF approval and guidance to ensure that ESOH requirements are integrated within professional training, military member evaluations, and the appropriate civilian employee performance plans to include ESOH related responsibilities, accountability, and performance.

3.3.2. Develop, implement, oversee, and maintain effective programs aimed at reducing Federal Employee Compensation Act (FECA) claim rates and costs.

3.4. Deputy Chief of Staff, Operations (AF/A3) will:

3.4.1. Ensure operational capabilities and Joint Capabilities Integration and Development System (JCIDS) documents address ESOH related tasks and requirements, where applicable. Establish procedures to ensure any significant ESOH issues are identified and, if necessary, elevated to the appropriate level for resolution.

3.4.2. Develop policies, for SECAF approval, to assess and manage ESOH risk for airspace and operational ranges.

3.4.3. Ensure the airspace and range NI needed to meet current and future mission requirements are assessed and managed.

- 3.5. Deputy Chief of Staff, Logistics, Engineering and Force Protection (AF/A4) will:
- 3.5.1. Develop and maintain environmental program guidance within AF/A4 publications series pursuant to their authorities.
 - 3.5.2. Develop and maintain a list of appropriate facilities as defined by DoDI 4715.17 and ensure formal Environmental Management Systems (EMS) declaration and/or re-declaration guidance is established for all appropriate facilities. Installations may pursue third party EMS registration if a benefit to the mission can be documented.
 - 3.5.3. Ensure environmental subject matter experts review JCIDS documents to provide inputs on needed environmental or NI capabilities.
- 3.6. Deputy Chief of Staff, Strategic Plans and Programs (AF/A5/8) will integrate ESOH requirements into the Air Force strategic and fiscal guidance IAW HAF MD 1-56, *Deputy Chief of Staff Strategic Plans and Programs*.
- 3.7. Air Force Surgeon General (AF/SG) will:
- 3.7.1. Develop and maintain occupational and environmental health (OEH) program policy and guidance within AF/SG publications series pursuant to authorities established in HAF MD 1-48, *The Air Force Surgeon General*.
 - 3.7.2. Provide SAF/IE an annual review of programming, budgeting, and performance of the OEH program, to include the Defense Health Program.
 - 3.7.3. Ensure occupational health subject matter experts review JCIDS documents to provide inputs on needed weapon system capabilities.
- 3.8. Chief of Safety (AF/SE) will:
- 3.8.1. Develop and maintain safety program policy and guidance within AF/SE publications series pursuant to authorities established in HAF MD 1-46, *Chief of Safety*.
 - 3.8.2. Provide SAF/IE an annual review of programming, budgeting, and performance of the safety programs, to include the activities of the Air Force Safety Center.
 - 3.8.3. Ensure safety subject matter experts review JCIDS documents to provide inputs on needed weapon system capabilities.
 - 3.8.4. Serve as HAF's designated authority and lead agent for the overall cross-functional integration and sustainment effort of RM into the HAF staff and all subordinate MAJCOMs, units, and agencies.
 - 3.8.5. Ensure RM curriculum integration is tailored to meet the unique mission of the school or program in consideration of the goals outlined in this Policy Directive.
- 3.9. The General Counsel of the Air Force (SAF/GC):
- 3.9.1. Serves as the principal legal adviser to SAF/IE on ESOH policy.
 - 3.9.2. Serves as the principal legal representative on all ESOH compliance-related issues involving the OSD office of General Counsel or the General Counsel offices of other federal agencies.

3.10. Public Affairs (SAF/PA) will advise and assist SAF/IE in the development of communication options for the ESOH program to internal and external audiences.

LISA S. DISBROW
Acting Secretary of the Air Force

Attachment 1**GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION*****References***

- DoDD 4715.1E, *Environment, Safety, and Occupational Health (ESOH)*, 19 Mar 05
- DoDI 4715.17, *Environmental Management Systems*, 15 Apr 09
- DoDI 4715.18, *Emerging Contaminants (ECs)*, 11 Jun 09
- DoDI 6055.01, *DoD Safety and Occupational Health (SOH) Program*, 14 Oct 14
- HAF MD 1-18, *Assistant Secretary of the Air Force (Installations, Environment, and Energy)*, 10 Jul 14
- ANSI Z10-2005, American National Standard - Occupational Health and Safety Management Systems, 25 Jul 05
- ISO 14001:2015, Environmental Management Systems – Requirements with Guidance for Use, 15 Sep 15
- DoDI 4000.19, *Support Agreements*, 25 April 13
- AFPD 25-2, *Intra-service Support Agreements*, 28 Aug 14
- AFPD 90-1, *Policy Formulation*, 6 Oct 2010
- AFMAN 33-363, *Management of Records*, 1 Mar 08
- AFI 33-360, *Publications and Forms Management*, 1 Dec 15
- AFI 63-101/20-101, *Integrated Life Cycle Management*, 7 Mar 13
- AFPAM 63-128, *Integrated Life Cycle Management*, 10 Jul 14
- DoDI 5000.02, *Operation of Defense Acquisition Systems*, Jan 15
- MIL STD 882, *Standard Practice for System Safety*, 11 May 12
- NEPA/Executive Order 12114 compliance schedule, Oct 13
- HAF MD 1-56, *Deputy Chief of Staff Strategic Plan and Programs*, 28 Jan 16
- HAF MD 1-48, *The Air Force Surgeon General*, 7 May 15
- HAF MD 1-46, *Chief of Safety*, 10 Dec 16

Adopted Forms

- AF Form 847, *Recommendation for Change of Publication*, 22 Sept 09

Abbreviations and Acronyms

- AFI**— Air Force Instruction
- AFMAN**— Air Force Manual
- AFPD**— Air Force Policy Directive

AFRIMS— Air Force Records Information Management System

ANSI— American National Standards Institute

APN— Abatement Priority Number

DASHO— Designated Agency Safety and Health Official

DoD— Department of Defense

DoDD— Department of Defense Directive

DoDI— Department of Defense Instruction

EMS— Environmental Management System

ESOH— Environment, Safety, and Occupational Health

FECA— Federal Employee Compensation Act

FGS— Final Governing Standards

HAF— Headquarters Air Force

ILCM— Integrated Life Cycle Management

ISO— International Organization for Standardization

JCIDS— Joint Capabilities Integration and Development System

LRCM— Life Cycle Risk Management

MIL STD— Military Standard

NI— Natural Infrastructure

RM— Risk Management

OMB— Office of Management and Budget

OPR— Office of Primary Responsibility

OSHA— Occupational Safety and Health Administration

RAC— Risk Assessment Code

RDS— Records Disposition Schedule

RM— Risk Management

SOFA— Status of Forces Agreement

SOH— Safety and Occupational Health

VPP— OSHA Voluntary Protection Program

Terms

Abatement Priority Number— relative priority of risk assessment codes based on cost effective indexes.

Environment, Safety, and Occupational Health (ESOH)— refers to the combination of disciplines that encompass the processes and approaches for addressing laws, regulations,

Executive Orders (EO), DoD policies, environmental compliance, and hazards associated with environmental impacts, system safety (e.g., platforms, systems, system-of-systems, weapons, explosives, software, ordnance, combat systems), radiological health, occupational safety and health, hazardous materials management, and pollution.

Environmental Health— The discipline and program concerned with identifying and preventing illness and injury due to exposure to hazardous chemical, physical, and biological agents that may be encountered in the ambient environment – air, water, or soil.

Functional Offices—This is the different Environment, Safety, and Occupational Health offices that establishes policy and guidance.

Hazard— Any active or latent condition that can cause mission degradation; injury, illness, or death to personnel; or damage to, or loss of, equipment or property.

Lead Agent— Office or agency that has primary oversight of their Air Force-level program to include oversight and development of policies for SECAF approval and guidance, courseware, tools and/or techniques specific to their area of responsibility.

Natural Infrastructure— All natural resources assets (air and airspace, water, and land) that the Air Force operates in or controls. These are a subset of the overall installation assets required to effectively conduct operations at installations or ranges to support operational capability over perpetual useful life. NI assets are distinct and tangible ecological or physical components of natural infrastructure (e.g. forests, grasslands, wetlands, water bodies, aquifers and mineral resources) that can be managed as statutory assets or entitlements to access and use the products and capacities of the natural environment.

Occupational Health— The discipline and program concerned with prevention of illness resulting from work-related factors. It includes the prevention of illness during deployments not resulting from hostile acts to reduce disease and non-battle injury (DNBI) rates.

Risk Assessment— The process of detecting/prioritizing hazards and their causes, and systematically assessing the associated risks to mission or activity success.

Risk Assessment Code— The assignment of a hazard severity and probability of occurrence indices to a potential hazard. The RAC provides the foundation for comparative analysis among identified hazardous conditions which may impact human health, public health or the environment.

Risk Management— The systematic process of identifying hazards, assessing risk, analyzing risk control options and measures, making control decisions, implementing control decisions, accepting residual risks, and supervising/reviewing the activity for effectiveness.

System Safety— The term used to describe the application of the RM principles and practices to the Systems Engineering ESOH risk management process during the developing, sustaining, modifying, and disposing of a weapon system.

Attachment 2

**ENVIRONMENTAL SAFETY, AND OCCUPATIONAL HEALTH MANAGEMENT
SYSTEM (ESOHMS) HIERARCHICAL APPROACH**

Table A2.1. Environmental Safety, and Occupational Health Management System (ESOHMS) Hierarchical Approach.

Management Level	Management System Requirements
HAF	<ul style="list-style-type: none"> • Policy (AFPDs) • Programs (AFIs) • Requirements (laws, OSD, USAF, etc.) • AF-level objectives, targets, metrics • Communication (to lower levels) • Data collection/analysis • Checking (HAF and sampling below) • Management review (HAF ESOH Council) • Reporting (to OSD, EPA, OMB, CEQ, OSHA)
MAJCOM	<ul style="list-style-type: none"> • Programs (MAJCOM Instructions) • Requirements (laws, OSD, USAF, etc) • MAJCOM-level objectives, targets, metrics • Communication (to higher and lower levels) • Data collection/analysis • Checking (MAJCOM and sampling below) • Management review (MAJCOM ESOH Council) • Reporting (to HAF)
Installations	<ul style="list-style-type: none"> • All standard elements in place (Attachment 3) • Environmental management system shall meet the performance elements of ISO 14001 • Occupational Health and Safety Management Systems shall meet the performance elements of ANSI Z10 or OSHA VPP.

Attachment 3

EFFECTIVE MANAGEMENT SYSTEM ATTRIBUTES

Table A3.1. Effective management system attributes supporting ESOH requirements.

Element	Sub-Element	Requirements
Policy and Participation	Management Systems	ESOH management systems shall be designed to demonstrate life cycle benefits of reducing ESOH risks while improving mission performance.
	Leadership & Employee Participation	ESOH AFIs shall require commanders to establish meaningful ways for Airmen to be actively engaged and participate in ESOH programs to include incentive/award programs.
Planning	Management Systems Aspects / Impacts	ESOH AFIs shall identify the applicable regulations, standards and legal requirements and define processes to identify and prioritize the aspects/impacts. The Risk Assessment Code process shall be used to support command decisions in prioritizing corrective actions to identified ESOH risks.
	Objectives, Targets and Programs	HAF, MAJCOM and installation ESOH Councils shall establish goals, measures, objectives, and targets. Additionally, each ESOH Council shall identify ESOH aspects carrying the greatest risk and formulate an action plan to reduce the risk. Councils shall employ and support cross-functional teams, as appropriate, to work issues, develop procedures, and provide recommendations to senior leadership necessary to meet ESOH Council goals.

Implementation and Operation	Resources, roles, responsibility and authority	ESOH functional AFIs will clearly define responsibilities and authorities for effective ESOH management to reduce risk and ensure appropriate resources are available.
	Competence, training, and awareness	ESOH functional AFIs shall ensure that Airmen who have the potential to cause a significant ESOH impact are competent on the basis of appropriate education, training or experience, and that appropriate training records are maintained. AFIs shall require employee training to ensure awareness of the ESOH management systems; ESOH laws, AFIs, and policies that apply to their activities; specific ESOH risks inherent in the
	Communication	ESOH functional AFIs shall establish and implement communication procedures that achieve prompt employee reporting of work related injuries, illnesses, incidents (including environmental), hazards, and risks. AFI's shall encourage and provide a way for employees to make recommendations regarding possible hazard control and reporting procedures; and the identification and removal of barriers to reporting.
Management Review	Operational Control	Operations with significant aspects/risks shall be controlled in a manner to minimize adverse impacts. Environmental, Safety and Occupational Health AFIs will include a hierarchy of controls approach.
	Procurement	Air Force and ESOH functional AFIs will establish processes to identify, evaluate, and control the potential ESOH risks associated with products, raw materials, and other goods before introduction into the work environment.
	Compliance and Management Systems Assessments	ESOH functionals shall ensure a self-assessment process and integrate external Management System reviews into the inspector general AF Inspection System Continual Evaluation Process, including the Unit Effectiveness Inspection (UEI). MAJCOMs shall conduct internal management system reviews of their installations ESOH Management Systems and report on its effectiveness to HAF on an annual basis.
	Nonconformity, corrective action and preventive action	The ESOH functional AFIs shall ensure corrective and preventive action procedures for findings identified under external regulatory inspections and AF Inspection System. ESOH councils will be established at HAF, MAJCOMs and installations to effectively manage and oversee ESOH programs.