# BY ORDER OF THE SECRETARY OF THE AIR FORCE

DEPARTMENT OF THE AIR FORCE INSTRUCTION 48-145

**22 SEPTEMBER 2022** 

Aerospace Medicine

OCCUPATIONAL AND ENVIRONMENTAL HEALTH



## COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: Publications and forms are available for downloading or ordering on the e-

Publishing website at www.e-publishing.af.mil/

**RELEASABILITY:** There are no releasability restrictions on this publication.

OPR: AFMRA/SG3PB Certified by: AF/SG3/4

(Maj Gen Sharon R. Bannister)

Supersedes: AFI48-145, 11 July 2018 Pages: 44

This instruction implements DoD Instruction (DoDI) 6055.05, Occupational and Environmental Health (OEH); Air Force Policy Directive (AFPD) 48-1, Aerospace & Operational Medicine Enterprise (AOME); and AFPD 90-8, Environmental, Safety, & Occupational Health Management and Risk Management. It establishes procedures consistent with the guidance in Air Force Instruction (AFI) 91-202, US Air Force Mishap Prevention Program and DAFI 91-204, Safety Investigations and Reports, for medical support requirements. This publication applies to the entire Department of Air Force (DAF), including all federal civilian employees and uniformed members of the Regular Air Force, the Air Force Reserve, the Air National Guard, and the US This instruction does not apply to DAF units receiving occupational and Space Force. environmental health (OEH) support from other military services under joint basing agreements. The lead service under the joint basing agreement will provide OEH support in accordance with their regulations and guidance. The supported unit is responsible for ensuring compliance with the tracking and completion of occupational health exams and training requirements. Additionally, this instruction does not apply to employees working under government contract. Contractors are solely responsible for compliance with Occupational Safety and Health Administration (OSHA) standards and the protection of their employees unless otherwise provided by law or regulation to be specified in the contract. This instruction does not prohibit providing workplace sampling and survey information to contractors subject to local arrangements. Compliance with the attachment is not mandatory. Ensure all records generated as a result of processes prescribed in this publication adhere to Air Force Instruction 33-322, Records Management and Information Governance Program, and are disposed in accordance with the Air Force Records Disposition Schedule, which is located in the Air Force Records Information Management System. Refer

recommended changes and questions about this publication to the OPR, AFMRA/SG3PB using the DAF Form 847, Recommendation for Change of Publication; route DAF Forms 847 from the field through the appropriate chain of command. This publication may be supplemented at any level, but all supplements must be routed to the office of primary responsibility (OPR), AFMRA/SG3P for coordination prior to certification and approval. The authorities to waive wing, unit, delta or garrison level requirements in this publication are identified with a Tier ("T-0, T-1, T-2, T-3") number following the compliance statement. See DAFMAN 90-161, Publishing Processes and Procedures, for a description of the authorities associated with the tier numbers. Submit requests for waivers through the chain of command to the appropriate Tier waiver approval authority, or alternately, to the publication OPR for non-tiered compliance items. This instruction requires the collection and or maintenance of information protected by the Privacy Act of 1974 authorized by 10 U.S.C., Section 9013, Power and Duties of the Secretary of the Air Force; 10 U.S.C., Chapter 55, Medical and Dental Care; Executive Order 12196, Occupational Safety and Health Programs for Federal Employees; and Executive Order 9397 as amended by Executive Order 13478, Amendments to Executive Order 9397 Relating to Federal Agency Use of Social Security Numbers. The applicable SORN F044 AF SG E, Electronic Medical Records System is https://dpcld.defense.gov/Privacy/SORNsIndex/DOD-Component-Articleavailable View/Article/569877/f044-f-sg-e/. The use of the name or mark of any specific manufacturer, commercial product, commodity, or service in this publication does not imply endorsement by the Air Force.

## **SUMMARY OF CHANGES**

This document has been revised and should be completely reviewed. This revision retains OEH requirements but removes program execution details. Major changes include the introduction of geobase capability to integrate OEH data into the shared, coordinated and collaborated platform. This publication also provides clarification of medical treatment facility (MTF) support to the military housing office and residents or patients of housing units that are government-owned and government-leased or managed under the military housing privatization initiative (MHPI). DAFI changes introduce the concept of unit based workplace OEH assessments and establish a minimum frequency of 36 months. Additionally, changes include new requirements for managing access to individual longitudinal exposure records (ILERs), increased coordination of health based risk assessment codes (RACs), employing Air Force Medical Service (AFMS) trusted care principles to manage OEH data quality, and creating and utilizing weapon system-specific standardized health risk assessments. Lastly, this DAFI introduces the Program Maturity Audit System (PMAS) as an OEH self-assessment tool and provides clarity and specificity to the measurement/assessment and management review steps of the DAF OEH management system process in chapter 5 and chapter 6.

Chapter 1—OVERVIEW			
	1.1.	Purpose.	5
	1.2.	Overview	5
	1.3.	Concepts.	6
Figure	1.1.	DAF OEH Program Management.	7

Figure	1.2.	The OEH Risk Management Cycle.
Chapte	er 2—R	OLES AND RESPONSIBILITIES
	2.1.	Assistant Secretary of the Air Force for Energy, Installations, and Environment (SAF/IE).
	2.2.	Deputy Assistant Secretary of the Air Force for Environment, Safety, and Infrastructure (SAF/IEE).
	2.3.	Air Force Surgeon General (AF/SG).
	2.4.	Air Force Medical Readiness Agency Aerospace & Operational Medicine Division (AFMRA/SG3P).
	2.5.	Major Command Surgeon (MAJCOM/SG).
	2.6.	Installation or Garrison Commander.
	2.7.	Installation or Garrison Environment, Safety, and Occupational Health (ESOH) Council.
	2.8.	Medical Unit Commander.
	2.9.	Chief of Aerospace Medicine (SGP).
	2.10.	Flight and Operational Medicine Clinic (FOMC) (or local equivalent)
	2.11.	Bioenvironmental Engineering (or local equivalent).
	2.12.	Public Health (or local equivalent).
	2.13.	Installation Occupational and Environmental Medicine Consultant (IOEMC)
	2.14.	Integrated Operational Support and MTF Physical Therapists (PTs) and Occupational Therapists (OTs).
	2.15.	Limited Scope Medical Treatment Facility Officer in Charge (OIC)
	2.16.	Geographically Separated Unit Commander or Delegate (Medical Aid Station)
	2.17.	711th Human Performance Wing, Airman Biosciences Division (711 HPW/RHB).
	2.18.	United States Air Force School of Aerospace Medicine (USAFSAM)
	2.19.	DAF Inspection Agency/Surgeon General (DAFIA/SG).
	2.20.	Injury Compensation Specialist.
	2.21.	Installation Occupational Safety.
	2.22.	Base Civil Engineer.
	2.23.	Chief of the Installation Contracting Office
	2.24.	Unit/Organizational Commander.
	2.25.	Unit Health Monitor.
	2.26.	Workplace Supervisor.

	2.27.	Employee.	27
Chapte	er 3—Pl	LANNING	28
	3.1.	Overview	28
	3.2.	Supporting Policy Elements	28
Figure	3.1.	Key Elements of the DAF OEH Program.	29
Chapte	er 4—E	XECUTION	30
	4.1.	Overview.	30
	4.2.	Design Review and Change Management.	30
	4.3.	OEH Assessments.	30
	4.4.	Occupational and Environmental Health Clinical Surveillance.	31
	4.5.	Education and Training	31
	4.6.	Emergency Preparedness.	32
	4.7.	Documentation.	32
Chapte	er 5—M	EASUREMENT AND ASSESSMENT	33
	5.1.	Performance Indicators.	33
	5.2.	Quality Measures	33
	5.3.	Assessment	33
	5.4.	Feedback to the Planning Process.	33
Chapte	er 6—M	ANAGEMENT REVIEW	34
	6.1.	Purpose.	34
	6.2.	Annual PMR.	34
	6.3.	Outcome and Follow-Up.	34
Attach	ment 1–	-GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION	36

## Chapter 1

#### **OVERVIEW**

**1.1. Purpose.** The purpose of the DAF OEH program is to protect the health and welfare of our workforce and community environments while enhancing combat and operational capabilities and ensuring adherence to OSHA standards. The program is designed to mitigate OEH-related health risks through the optimum application of aerospace and operational medicine capabilities. It seeks to identify, assess, and eliminate or control OEH hazards associated with day-to-day operations across the full lifecycle of acquisition, sustainment and support for weapon systems, munitions and other materiel systems. The OEH program is a key component of the AF Environmental, Safety, and Occupational Health (ESOH) program as directed in AFPD 90-8.

### 1.2. Overview.

- 1.2.1. AFPD 91-2, *Safety Programs* require that every employee be provided with a work environment that is free from recognized hazards that pose an unacceptable risk of causing death, injury or illness. OEH hazards must be anticipated, recognized, evaluated, controlled, and communicated to enhance workforce availability and mission capability. Commanders, federal civilian leaders and workplace supervisors, at each management level, are required to advocate for and demonstrate a leadership commitment to a strong OEH program and provide all personnel safe and healthy working conditions that prevent illness and injuries. (**T-0**) An effective OEH program uses active hazard prevention and controls, and provides education and training that will enable personnel to recognize and prevent OEH-related injuries and illnesses. Additionally, an effective program prevents or mitigates environmental hazards from negatively effecting the health of individuals and populations (e.g., service members, DoD federal civilians, beneficiaries, veterans). All personnel have a right and responsibility to actively participate in their organization's OEH program. (**T-0**)
- 1.2.2. This instruction serves as the foundational document for the overall DAF OEH program. The specific program execution requirements are contained in supporting DAF policy directives, instructions and manuals as listed in **attachment 1**. This instruction outlines standard procedures to effectively identify, assess, eliminate or control, and communicate OEH hazards and risks in the workplace and community environments. This instruction also provides policy regarding the responsibility of DAF occupational medicine to advise workers and supervisors regarding worker medical fitness to safely perform essential job functions.
- 1.2.3. Operational considerations such as mission requirements and resource constraints, especially in deployed environments, may necessitate deviation from some organizational structures and processes outlined in this instruction. However, the OEH hazard identification, risk assessment and documentation process and principles outlined in this instruction are identical in both home station and deployed settings. This facilitates the establishment of an accurate exposure record in accordance with Presidential Review Directive 5, *Improving the Health of Our Military, Veterans, and Their Families*. In addition, DoDI 6490.03, *Deployment Health* requires the creation and maintenance of an exposure assessment record for each Airman's and Guardian's full career. The requirements outlined in this manual relative to ESOH Council and OEH Working Group (OEHWG) do not apply in deployed environments.

- 1.2.4. The role of the Aerospace and Operational Medicine Enterprise (AOME) to human OEH focuses on health risk assessment (HRA) and associated health monitoring, sampling, and surveillance of actual and potential physical, chemical, biological and radiological hazards, man-made and naturally occurring, in the workplace and on-base community environments. There are parts of the workplace and on-base community environments that can be reasonably modified by short-term and long-term interventions to prevent or reduce human health impacts and there are aspects of the natural environment that cannot.
- 1.2.5. Examples of environmental factors suited to short- and long-term interventions are the modifiable aspects or impacts to human health of:
  - 1.2.5.1. Air, water and soil impacted by biological, chemical or radiological agents.
  - 1.2.5.2. Ionizing radiation, electromagnetic fields and noise.
  - 1.2.5.3. Built environments, including industrial and administrative workplaces, facilities intended for community use and housing.
  - 1.2.5.4. Behavior related to the availability of safe water and sanitation facilities, such as washing hands, and contaminating food with unsafe water or unclean hands.
- 1.2.6. It is vitally important that OEH concerns and deficiencies be communicated early in the acquisition process as capability requirements or gaps in accordance with Chairman of the Joint Chiefs of Staff Instruction (CJCSI) 5123.01I, Charter of the Joint Requirements Oversight Council and the Implementation of the Joint Capabilities Integration and Development System and AFPD 90-8, Environmental, Safety, and Occupational Health Management and Risk Management. OEH Science and Technology (S&T) research and development (R&D) concerns/deficiencies should be identified and addressed in accordance with AFI 61-101, Management of Science and Technology. It is equally important that concerns and deficiencies be communicated during fielding and sustainment to eliminate or mitigate identified OEH risks in existing systems.

## 1.3. Concepts.

- 1.3.1. This instruction requires the use of a management system approach, as illustrated in **figure 1.1** to ensure continual program improvement through clearly defined OEH roles and responsibilities, planning requirements, effective execution, and management review. It provides a structured framework using the plan-do-check-act cycle for:
  - 1.3.1.1. Organizing and managing OEH functions and responsibilities to develop, implement, and sustain required OEH capabilities.
  - 1.3.1.2. Evaluating the effectiveness of the OEH program and determining how it supports the operational mission.
- 1.3.2. The DAF uses the Defense Occupational and Environmental Health Readiness System-Industrial Hygiene (DOEHRS-IH), hereafter referred to as DOEHRS, to manage OEH health risk data and serve as the information management system for exposure recordkeeping and reporting.
- 1.3.3. Individual Airmen and Guardian's OEH exposure records managed in DOEHRS are accessible by DoD and Department of Veterans Affairs (VA) medical providers through the ILER web-based application. ILER creates a complete record of a service member's OEH

exposures over the course of his or her career by linking individuals to known exposure events and incidents and compiling the exposure history to distill and report the relevant data and information. ILER is intended to provide DoD and VA clinicians, claims adjudicators, and benefit advisors the actionable data required to improve the care provided to service members and veterans.

INCREASE REDUCE CONTINUAL IMPROVEMENT Health Plan Do Check Act Hazards Leadership, Policy & Measurement & Management Execution Health Assessment Planning Review Sustainable Risks Operations **Establish OEH Policy** Design Review & Performance Measures Management of Management Review OFH Identify & Prioritize Periodic Audits Change Costs **OEH Program Issues** Outcomes and Follow-Health & Health Risk Corrective & Safety Develop OEH Program Lost Assessment **Preventive Actions** Time Objectives & targets Clinical Surveillance Prepare Mission Workforce Implementation Plans **Education & Training** Degradation Availability Emergency Preparedness Documentation

Figure 1.1. DAF OEH Program Management.

1.3.4. OEH risks are communicated through the risk management (RM) process to engage installation leadership in OEH exposure and hazard reduction and resource prioritization. The overall OEH program contribution to the supported organization's RM process is depicted in **Figure 1.2** The OEH program expands upon the DAF RM process to align with DoD, American Industrial Hygiene Association's (AIHA) and the National Academy of Science's risk assessment protocols. Additionally, the OEH RM process adds an inner circle to emphasize that constant communication and continuous improvement must occur throughout each one of the five steps.

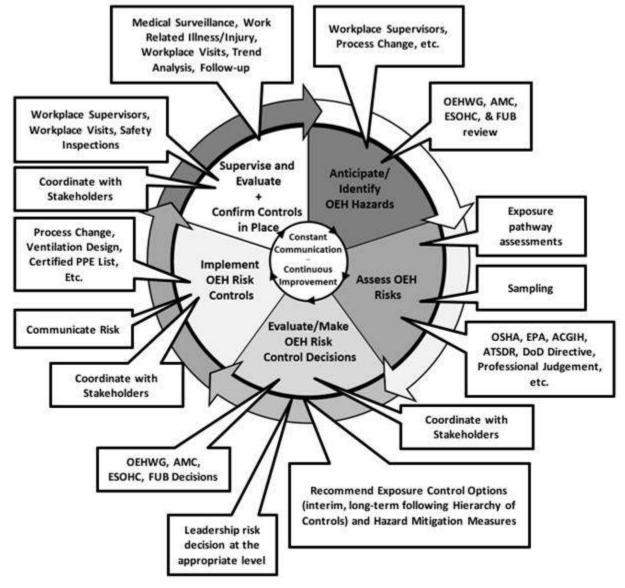


Figure 1.2. The OEH Risk Management Cycle.

- 1.3.5. AFMS personnel play a key role in the RM process by identifying actual and potential exposures and health threats, assessing and determining significance of those exposures and health risks, determining appropriate control measures, communicating exposure and health risk information, and performing medical surveillance. Exposure and health risk assessment information enhance the decision-making process by helping commanders, program managers and other decision makers to effectively apply the principles of RM outlined in DoDI 6055.05 and AFI 90-802, *Risk Management*:
  - 1.3.5.1. Anticipate and identify exposures/hazards.
  - 1.3.5.2. Assess hazards to determine risks.
  - 1.3.5.3. Develop controls and make risk decisions.
  - 1.3.5.4. Implement risk controls.

1.3.5.5. Supervise and evaluate & confirm controls in place.

## Chapter 2

#### **ROLES AND RESPONSIBILITIES**

# 2.1. Assistant Secretary of the Air Force for Energy, Installations, and Environment (SAF/IE).

- 2.1.1. Develops policy and provides oversight of all matters pertaining to the formulation, review and execution of plans, policies, programs and budgets relative to the DAF ESOH programs.
- 2.1.2. Serves as the DAF Designated Agency Safety and Health Officer (DASHO) and principal DAF representative on all ESOH issues with the Office of the Secretary of Defense (OSD) staff, federal agencies and Congress. Delegates ESOH program responsibilities, with exception of the DASHO duties, to the Deputy Assistant Secretary for Environment, Safety, and Infrastructure.
- 2.1.3. Co-chairs Headquarters Air Force (HAF) ESOH Council. Conducts senior level review of the DAF OEH program in accordance with AFI 90-801, *Environment, Safety, and Occupational Health Councils*.
- 2.1.4. Ensures the OEH program management review (PMR) is conducted at all levels annually.

# 2.2. Deputy Assistant Secretary of the Air Force for Environment, Safety, and Infrastructure (SAF/IEE).

- 2.2.1. As delegated by the SAF/IE, provides policy, guidance, direction and oversight of all matters pertaining to the formulation, review and execution of plans, policies, programs and budgets relative to the ESOH program. Oversees implementation of those programs and approves them annually.
- 2.2.2. Establishes strategic priorities and associated goals, objectives and performance measures for the OEH program in coordination with the Air Force Medical Readiness Agency Aerospace and Operational Medicine Division (AFMRA/SG3P).
- 2.2.3. Conducts PMRs of the progress of the DAF ESOH programs, at least annually. Reports the status of the DAF ESOH programs by submitting an annual PMR to the Assistant Secretary of Defense (Readiness).

## 2.3. Air Force Surgeon General (AF/SG).

- 2.3.1. Provides strategic direction and develops policy to execute the DAF OEH program.
- 2.3.2. Advocates for exposure mitigation through health risk assessments, surveillance and control requirements associated with health-based OEH programs through the medical and line of the AF planning, programming, budgeting and execution (PPBE) system.
- 2.3.3. Reports the status of the OEH program annually and on an as-requested basis to SAF/IE through a formal PMR.

# 2.4. Air Force Medical Readiness Agency Aerospace & Operational Medicine Division (AFMRA/SG3P).

2.4.1. Assists AF/SG with developing policy to execute the OEH program.

- 2.4.2. Plans, programs, and budgets for resources and provides oversight for execution of the OEH program through the office of Manpower, Personnel, and Resources (AF/SG1/8)..
- 2.4.3. Establishes strategic priorities and associated goals, objectives and performance measures for the OEH program in coordination with SAF/IEE. Communicates goals, objectives, and performance measures to MAJCOM/SG and installation OEH personnel. Works with the USAF School of Aerospace Medicine (USAFSAM) to provide guidance to the MAJCOM/SGs and installation OEH personnel to implement strategic priorities and measure performance.
- 2.4.4. Provides consultation on OEH issues to HAF, MAJCOM/FLDCOM, Defense Health Agency (DHA), and other agencies.
- 2.4.5. Coordinates OEH technical expertise to acquisition program managers for the development, review, and coordination of the programmatic environment, safety, and occupational health evaluation in accordance with AFI 63-101/20-101, *Integrated Life Cycle Management*.
- 2.4.6. Reviews OEH risk reduction and elimination opportunities and makes recommendations to assist line of the AF in executing effective resource prioritization.
- 2.4.7. Appoints representatives and participates in DoD, DAF and Defense Health Agency (DHA) OEH working groups, committees, integrated process teams and advisory groups to advocate and advance DAF OEH goals and objectives (e.g., Industrial Hygiene Working Group, Environmental Health Working Group, Occupational Medicine Working Group, OEH Working Group, DOEHRS Services Functional Working Group (SFWG)).
  - 2.4.7.1. SFWG representatives shall identify and prioritize DOEHRS technical and management issues to DHA for modification or other appropriate actions.
  - 2.4.7.2. DOEHRS issues not resolved at the SFWG shall be elevated to AFMRA/SG3P for resolution at the DHA OEH Working Group.
- 2.4.8. Establishes the bioenvironmental engineering (BE) equipment modernization and standardization process and ensures consistent utilization.
- 2.4.9. Monitors OEH enforcement actions for trend analysis and corrective action. Works with USAFSAM to develop best practices or corrective actions and communicates this information to MAJCOM/SGs.
- 2.4.10. Directs, oversees, and approves PMAS development and content. Reviews PMAS trends for OEH policy and resourcing decisions.
- 2.4.11. Provides direction and oversight for the development and maintenance of the industrial hygiene risk assessment methodology (IH RAM) and environmental health risk assessment methodology (EH RAM).
- 2.4.12. Provides annual guidance each fiscal year to base and MAJCOM/SG staff on standardized execution of the PMR required by **Chapter 6** of this instruction. Reviews MAJCOM PMRs for trend analysis to inform the annual SAF/IE PMR and OEH policy decisions.

2.4.13. Publishes and maintains OEH program self-assessment communicators within the management internal control toolset (MICT) in accordance with DAFI 90-201, *The Air Force Inspection System*.

## 2.5. Major Command Surgeon (MAJCOM/SG).

- 2.5.1. Establishes OEH program medical support priorities and supplements to this instruction when needed to execute MAJCOM mission requirements.
- 2.5.2. Assists in the Air Force PPBE process by identifying and advocating for operational OEH requirements.
- 2.5.3. Supports OEH hazard identification, control, mitigation, or elimination considerations in the DAF operational capability requirements development process.
- 2.5.4. Ensures OEH program management performance monitoring across all bases within their command through the MAJCOM and installation ESOH Councils or other AFI 90-801 approved methods. Engages installation-level OEH personnel within the MAJCOM to assist in applying corrective actions to identified areas of non-compliance and best practices.
- 2.5.5. Disseminates information pertaining to policy and new or pending legislation within the MAJCOM by communicating to installation OEH staff.
- 2.5.6. Coordinates with AFMRA/SG3P to identify and resolve OEH programmatic issues.
- 2.5.7. Ensures that each geographically separated unit (GSU) within their area of responsibility has a supporting MTF/Medical Unit assigned in accordance with AFI 25-201, *Intra-Service, Intra-Agency, and Inter-Agency Support Agreements Procedures* to assist with the OEH program as outlined in this instruction.
- 2.5.8. Identifies programmatic and policy implications within the MAJCOM and collects/analyzes installation-level data to be consolidated at AFMRA.
- 2.5.9. Sends applicable continual evaluation, staff assistance visits, and enforcement action reports to the MAJCOM Inspector General's office and DAF Inspection Agency (DAFIA) medical core team, as requested for review prior to the unit effectiveness inspection (UEI) capstone.
- 2.5.10. Consolidates installation OEH PMRs and briefs to the MAJCOM ESOH Council, steering committee or other AFI 90-801 approved method and forwards to AFMRA/SG3P. **Exception:** Air Force Reserve Command Surgeon General (AFRC/SG) and Air National Guard Surgeon General (ANG/SG) staffs may execute OEH PMRs on behalf of subordinate units without full time OEH staff or host-tenant support agreements (HTSAs).
- 2.5.11. Ensure appropriate BE support for the MAJCOM hazardous material management process (HMMP) activities in accordance with AFMAN 32-7002, *Environmental Compliance and Pollution Prevention*.
- 2.5.12. Acts as the "medical authority" as described in DoDM 4715.05 Volume 3, Overseas Environmental Baseline Guidance Document and DoDI 4715.08, Remediation of Environmental Contamination Outside the United States for OEH issues outside the continental United States (OCONUS). This responsibility may be delegated to a qualified individual or office.

## 2.6. Installation or Garrison Commander.

- 2.6.1. Provides a safe and healthy workplace and community environment for all military and federal civilian personnel in accordance with:
  - 2.6.1.1. DoD ESOH requirements.
  - 2.6.1.2. DAF ESOH policies as established in AFPD 90-8.
- 2.6.2. Provides OEH personnel clearance and access to DAF workplaces governed by this instruction. (**T-1**)
- 2.6.3. Prioritizes continuous improvement opportunities to meet OEH goals and objectives. (T-2)
- 2.6.4. Directs execution of the installation OEH program through the installation ESOH Council or other approved methods in accordance with AFI 90-801. (**T-1**)
- 2.6.5. Ensures non-defense health program (DHP) OEH requirements necessary for compliance with federal law or the needs of the DAF are properly funded by the unit or organization to which the employee(s) in question belong(s). (**T-0**) This applies only to the organizations and units that directly belong to the base. Supported GSUs and tenant organizations are responsible for supporting the non-DHP OEH costs of their employees. (**T-1**)

# 2.7. Installation or Garrison Environment, Safety, and Occupational Health (ESOH) Council.

- 2.7.1. Provides senior leadership input, direction and senior management review of the installation OEH program in accordance with the requirements of AFI 90-801 and this instruction. (**T-1**)
- 2.7.2. Annually, provides a consolidated OEH PMR to the next higher level ESOH Council or equivalent in accordance with AFI 90-801. (**T-1**)
- **2.8. Medical Unit Commander.** For Regular AF medical units, this is the MTF commander, who is dual-hatted, and in that capacity, executes the duties, authorities, and responsibilities of both the MTF director and the service commander. Air Reserve Component (ARC) equivalent is a guard medical unit commander (GMU/CC) and the reserve medical unit commander (RMU/CC) (or local equivalent).
  - 2.8.1. Provides OEH support to the installation (or local equivalent) and supported units (as outlined in applicable host-tenant support agreements). (**T-0**) Provides appropriate scope of OEH support through organic capabilities. (**T-0**) Ensures OEH program support to DAF personnel is provided through agreement with the joint base lead when in a supported relationship on a joint base. (**T-0**)
  - 2.8.2. Directs the installation OEH program and ensures it is supported with adequate resources and staffing to implement the responsibilities outlined in this instruction. (**T-0**) Is responsible for the OEH program at supported units per applicable support agreements and ensures adequate staffing and resources to meet the requirements of supported units. (**T-2**)
  - 2.8.3. Ensures timely care is provided for OEH-related injuries and illnesses. (T-3)

- 2.8.4. Ensures prompt medical support and consultation is provided to the Injury Compensation Specialist. (**T-1**)
- 2.8.5. Advocates for projects with health-related impacts at the installation Facility Utilization Board (FUB). (**T-3**)
- 2.8.6. Ensures medical support and clinical evaluations of AF family housing, unaccompanied housing and MHPI residents who are DoD Tricare beneficiaries and exhibiting health-related symptoms that may be attributed to housing conditions. (**T-2**)
- 2.8.7. ARC medical unit commanders (or local equivalent) provide OEH support utilizing organic capabilities or through a HTSA and retains overall responsibility for ensuring execution of OEH support to ANG or AFRC personnel. (**T-1**) OPRs will be identified for OEH support in HTSAs outlining Regular AF and ARC responsibilities for total force integrated units and non-integrated units. OEH support will not be contingent on additional manpower to meet HTSA requirements, and the HTSA must address the following:
  - 2.8.7.1. A comprehensive OEH program including generation of workplace specific occupational and environmental health exposure data (OEHED), clinical occupational health exam requirements (COHER), associated medical surveillance exams, and the Occupational and Environmental Health Working Group (OEHWG). (**T-3**)
  - 2.8.7.2. Data management using DOEHRS and the Aeromedical Services Information Management System (ASIMS). (**T-3**)
  - 2.8.7.3. Occupational illness investigations in the Air Force Safety Automated System (AFSAS). (**T-3**)
  - 2.8.7.4. Pregnancy profiles. (**T-3**)
  - 2.8.7.5. Hazard communication (HazCom) program training. (T-3)
  - 2.8.7.6. Environmental health surveillance and occupational and environmental health site assessments (OEHSAs). (**T-3**)

# 2.9. Chief of Aerospace Medicine (SGP).

- 2.9.1. Leads the AOME execution of OEH program responsibilities. (**T-1**) Ensures the OEH program meets the goals and objectives outlined in this document, AFI 48-101 and as established by SAF/IEE and AFMRA/SG3P. (**T-1**)
- 2.9.2. Provides administrative and technical oversight of the OEH program at supported GSUs and munition support squadron (MUNSS) sites. (T-1)
- 2.9.3. Establishes an OEHWG under the direction of the Aerospace Medicine Council (AMC). (T-1)
- 2.9.4. Ensures integration of OEHWG activities with other installation ESOH professionals, including but not limited to safety, civil engineering, fire and emergency services, physical therapy, operational support teams, injury compensation specialist, and supported ARC unit medical representatives per the HTSA. (**T-1**)
- 2.9.5. Ensures medical surveillance examination (MSE) scheduling, administration, reporting, and follow up are accomplished in accordance with **paragraph 4.4** (**T-1**)

- 2.9.6. Ensures workers who require MSEs receive the appropriate exam. (T-1)
  - 2.9.6.1. Effectively partners with unit commanders (or designees) to minimize barriers for the timely accomplishment of the MSEs to the greatest extent possible. (**T-3**)
  - 2.9.6.2. Ensures public health (PH) regularly communicates MSE compliance rates to medical and line commanders through the local ESOH Council. (**T-3**)
- 2.9.7. Works with medical staff to ensure prompt medical support and consultation is provided to the injury compensation specialist or to the ANG injury compensation specialist and human resources office, as requested. (**T-1**)
- 2.9.8. Works with supervisors, individuals and the injury compensation specialist to expedite return-to-work for injured employees at supported GSUs and MUNSS sites. (**T-1**)
- 2.9.9. Works with medical staff to ensure MTF providers are trained to access and interpret patients' individual longitudinal exposure records (ILER) in the electronic health record when required to aid in medical diagnosis and treatment. (**T-0**)
- 2.9.10. Ensures OEHWG produces a consolidated OEH PMR that is presented at the installation ESOH Council. (**T-1**)
- **2.10. Flight and Operational Medicine Clinic (FOMC) (or local equivalent).** This section may be executed by FOMC, occupational medicine services (OMS), base operational medicine clinic (BOMC) or local equivalent as determined by the MTF commander.
  - 2.10.1. Supports the installation OEH program through MSE execution, occupational medicine consultation and workplace visits. (**T-1**)
  - 2.10.2. Ensures annual physician visits are completed to workplaces with high risk processes as identified in **paragraph 4.3.2.2**. (**T-1**) In addition to required annual visits, physicians should aim to visit all workplaces receiving medical surveillance exams (other than audiograms) once per year. Physicians communicate significant findings identified during workplace visits to BE, PH or safety as soon as possible, but no later than two workdays following discovery. (**T-1**)
  - 2.10.3. Serves as a member of the OEHWG, providing consultation on recommended OEH MSE and risk communication. (**T-1**)
  - 2.10.4. Assists healthcare providers in communication of MSE results to the worker within timeframes established by DAF and/or regulatory requirements. (**T-2**)
  - 2.10.5. Annually assesses program effectiveness by reviewing and reporting OEH performance as required by AFI 48-101 and AFI 90-801 using the methods outlined in **Chapter 5** and **Chapter 6** of this instruction as applicable. (**T-1**) Completes flight and operational medicine-specific PMR and presents at OEHWG for incorporation into the overall OEH PMR. (**T-1**)

## 2.11. Bioenvironmental Engineering (or local equivalent).

- 2.11.1. Supports the installation OEH program by providing commanders with health risk assessments and collaborating with stakeholders to identify risk mitigation strategies. (T-1)
- 2.11.2. Completes health risk assessments (HRAs). Anticipates, identifies, and assesses hazards to characterize OEH risk. (T-1)

- 2.11.2.1. Completes unit OEH assessments in accordance with **chapter 4** of this instruction and DAFMAN 48-146, *Occupational Health Program Management*. (**T-2**)
- 2.11.2.2. Ensures OEH assessments are accomplished using procedures outlined in DAFMAN 48-146 and USAF School of Aerospace Medicine (USAFSAM) guidance (e.g., standardized weapon system HRA templates, IH RAM, EH RAM, and technical guides). (T-1)
- 2.11.2.3. Develops a workplace monitoring plan in DOEHRS to identify detailed health risk assessments and sampling requirements not completed during the unit comprehensive HRA (e.g., air sampling, noise dosimetry, thermal stress monitoring). (**T-0**) Tracks monitoring plan tasks to completion according to timelines identified in DAFMAN 48-146. (**T-1**)
- 2.11.2.4. Provides OEH subject matter expertise during incident response in accordance with AFI 10-2501, *Emergency Management Program*, and documents all pertinent information in the DOEHRS incident reporting module. (**T-0**)
- 2.11.2.5. Assesses and documents OEH exposures for investigations related to mishaps and OEH-related illnesses as identified by a physician. (**T-0**)
- 2.11.2.6. Upon notification of pregnancy of a worker by PH, performs a workplace hazard evaluation, by process, on potential or actual OEH threats as part of the installation fetal protection program in accordance with AFI 48-133, *Duty Limiting Conditions* and DAFMAN 48-146. (**T-1**)
- 2.11.2.7. Investigates proposed changes to existing processes or operations, including hazardous material usage (in accordance with AFMAN 32-7002 authorization) and facilities (including, but not limited to construction plan or design reviews, the AF Form 332, *Base Civil Engineer Work Request*, or equivalent information technology system, AF Form 813, *Request for Environmental Impact Analysis*, or other base specific process) for potential OEH hazards to DAF personnel. (**T-1**) Appoints an individual(s) to attend the civil engineer work request review board. (**T-3**)
- 2.11.2.8. Provides BE HMMP team participation in accordance with AFMAN 32-7002 and environmental management system cross-functional team participation in accordance with AFI 32-7001, *Environmental Management*. (**T-1**)
- 2.11.2.9. Utilizes geobase to augment efforts to continuously identify and assess OEH exposure pathways on military installations or within the area of responsibility which may include areas such as non-industrial workplaces, construction sites, geographically separated ranges, recreational areas or units stationed at another nation's installation, etc. (T-1)
- 2.11.2.10. Conducts an OEHSA at in-garrison and deployed installations in DOEHRS in accordance with AFTTP 3-2.82\_IP, *Occupational and Environmental Health Site Assessment* and OEHSA technical guidance. (Deployed: **T-0**; In-garrison: **T-1**) Completes OEHSA sampling, exposure pathway assessments and OEH risk estimates based on reported health hazards or unit OEH assessment in accordance with **Chapter 4**. Identifies population at risk (PAR) and prioritizes OEH exposure pathways in the consolidated conceptual site model. (Deployed: **T-0**; In-garrison: **T-1**)

- 2.11.2.11. Updates BE portions of the periodic occupational and environmental monitoring summary (POEMS) as requested by combatant commanders (CCDRs) using Defense Health Agency Procedural Instruction (DHA PI) 6490.03, *Deployment Health Procedures* and CCDR guidance. (**T-0**) Where base operating support-integrator (BOS-I) responsibility is not the DAF or is unclear, contact the in-theater Air Force headquarters or MAJCOM/SG for clarification of responsibilities between the Uniformed Services.
- 2.11.2.12. In consultation with remedial project managers, provides exposure and health risk assessment technical review and support for plans and activities related to cleanup of sites when it has been determined that a potential threat to DAF worker and community health exists. (**T-1**)
- 2.11.2.13. In consultation with MAJCOM/SG, provides support to appropriate medical authority or designee when determining the presence or absence of a substantial impact to human health and safety (SIHS) overseas. (**T-0**) These unique assessments may cover a wide range of hazards and site conditions and required capabilities. Refer to USAFSAM Fact Sheet, *Substantial Impact to Human Health and Safety Determination Factsheet* that clarifies guidelines and highlights various tools for determining substantial impact to human health and safety.
- 2.11.2.14. When supporting a limited scope medical treatment facility (LSMTF) or medical aid station (MAS) with no BE officer assigned, provides technical oversight for all OEH assessments at the GSUs or MUNSS sites. (**T-2**) The level of involvement may range from simple oversight to performing the OEH assessments based on the technical expertise of the LSMTF or MAS personnel and the host-nation agreements for OCONUS locations.
- 2.11.2.15. Works with the weapon system maintenance organization when the BE identifies an OEH hazard associated with equipment, processes, or materials used by that organization to sustain and operate a weapon system. (**T-2**) If the equipment, process, or material is controlled by technical data (technical orders, technical manuals, technical specifications, etc.) that is owned by the acquisition program office that has configuration control of the system, the BE works with the system maintenance organization to contact the owning program office to submit an appropriate change request to eliminate or mitigate the hazard. (**T-2**) Change requests to eliminate or mitigate a hazard can take the form of a deficiency report (reference AFI 63-101/20-101) or an AFTO Form 22, *Technical Manual (TM) Change Recommendation and Reply*. Attempts to make changes to weapon system equipment, processes, or materials without formal prior program office approval can result in unintended consequences that involve even greater safety and OEH risks.
- 2.11.3. Recommends OEH risk mitigation strategies. (T-1)
  - 2.11.3.1. Leverages the hierarchy of controls (e.g., elimination/substitution, engineering, administrative, and personal protective equipment (PPE)) and partners with stakeholders to provide commanders with risk mitigation strategies. (T-1)
  - 2.11.3.2. Coordinates facility and infrastructure-related risk assessment codes (RACs) with civil engineering programmers and safety in accordance with DAFMAN 48-146 for inclusion in the installation master hazard abatement plan to enable abatement prioritization. (T-1)

- 2.11.4. Delivers OEH risk communication. Communicates OEH exposures, health risks, recommended controls, and/or corrective actions to senior leaders, unit commanders, workplace supervisor, affected individual(s), and members of a related Similar Exposure Group (SEG) or PAR. (T-1)
  - 2.11.4.1. Assists commanders and supervisors with integrating OEH input into risk-based decision processes. (**T-3**)
  - 2.11.4.2. Communicates directly with commanders with risk decision authority during the OEH risk decision making and risk acceptance process for critical (i.e., Risk Assessment Code (RAC) 1), serious (i.e., RAC 2) and moderate health hazards (i.e., RAC 3); and for extremely high, high, and medium exposure pathway assessments. (**T-1**)
- 2.11.5. Documents OEH exposures in DOEHRS. (T-0)
  - 2.11.5.1. Ensures DOEHRS is used to manage OEH program data (includes archiving of deployment-related OEH exposure data as required by DoDI 6490.03) following the USAFSAM DOEHRS Guide and data entry & reporting guides (DERGS). (**T-0**)
  - 2.11.5.2. Employs a quality control program to ensure accurate documentation of OEH exposures in DOEHRS to properly populate Airmen and Guardian's ILER. (**T-1**)
- 2.11.6. Serves as OEH program liaison to appropriate regulatory authorities, e.g., OSHA, as required. (**T-1**) Refer to AFI 91-202 for required BE actions following an OSHA event.
- 2.11.7. Serves as member of the OEHWG, providing consultation on OEH exposures and workplace-specific OEHED. (**T-1**) Provides DOEHRS OEHED documents to the OEHWG for each SEG reviewed. (**T-0**)
- 2.11.8. Annually assesses program effectiveness by reviewing and reporting OEH performance as required by AFI 48-101 and AFI 90-801 using the methods outlined in **chapter** 5 and **chapter** 6 of this instruction. (**T-1**)
  - 2.11.8.1. Completes BE-specific PMR and presents at OEHWG for incorporation into the overall OEH PMR. (**T-1**)
  - 2.11.8.2. Completes OEH program self-assessments using PMAS at least once per fiscal year and BE self-assessment communicators in MICT as required locally. (T-3) Communicates PMAS results to MTF leaders when non-compliance or other concerns are identified following unit established local business rules. (T-1)

## 2.12. Public Health (or local equivalent).

- 2.12.1. Serves as a member of the OEHWG, providing consultation on recommended MSEs, OEH training requirements, risk communication and OEH clinical surveillance. (**T-1**)
- 2.12.2. Conducts workplace visits every 12 months (high risk processes) and 36 months (comprehensive HRAs) at a minimum in accordance with **Chapter 4** and DAFMAN 48-146. (**T-2**)
- 2.12.3. Manages the OEH illness program. (T-1)
  - 2.12.3.1. Ensures all occupational and environmental illnesses reported to PH are investigated, initiated in AFSAS, and closed within 30 days in accordance with requirements in DAFI 91-204, *Safety Investigations and Reports*. (**T-1**)

- 2.12.3.2. Ensures the completed AF Form 190, *Occupational Illness/Injury Report* from AFSAS is filed in the patient's hard copy medical record or uploaded to the electronic medical record if resources allow. (**T-2**)
- 2.12.3.3. Provides OEH-related illness and exposure data to installation's ESOH Council, Federal Employees' Compensation Act (FECA) working group or equivalent and any other appropriate venue, which addresses ESOH issues and/or workers compensation issues. (**T-1**)
- 2.12.3.4. Ensures all appropriate information is available as needed for workers' compensation cases. (**T-1**)
- 2.12.4. Manages the installation fetal protection program. (T-1)
  - 2.12.4.1. Ensures all pregnant military workers assigned to the base are interviewed (upon notification of pregnancy by worker, supervisor, laboratory, or military healthcare providers) and ensures that all pregnant federal civilian workers are offered the same opportunity. (**T-1**)
  - 2.12.4.2. Consults with BE, the healthcare providers managing the pregnancy, and the installation occupational and environmental medicine consultant (IOEMC) on potential or actual OEH threats. (**T-1**) Initiates, if not already initiated by the provider, records health risks, and documents recommended preventive actions on the AF Form 469, *Duty Limiting Condition Report*, in accordance with AFI 44-102, *Medical Care Management*, AFI 48-133 and DAFMAN 48-146. (**T-1**)
- 2.12.5. Acts as a consultant to workplace supervisors for OEH training. (**T-3**) In coordination with BE, reviews the workplace's training materials to ensure compliance with regulatory requirements and makes available standardized training materials to the workplace supervisors. (**T-3**)
- 2.12.6. Provides administrative oversight of MSE program as directed by the IOEMC. (T-1)
  - 2.12.6.1. Works with supervisors, designated unit representatives or individual employees to maintain current SEG/workplace rosters using the occupational health supervisor module in ASIMS and schedules audiogram appointments. (**T-2**) SEG/workplace rosters shall be updated a minimum of every 3 months in ASIMS. (**T-2**)
  - 2.12.6.2. Coordinates with supervisors to maximize MSE completion rates and to minimize impact on mission where possible. (T-3)
  - 2.12.6.3. Provides unit commanders and unit health monitors access to their unit personnel MSE status and compliance via ASIMS Web. (**T-3**)
  - 2.12.6.4. Reports currency rates for all units with personnel on the MSE program to the AMC and at the installation ESOH Council (or equivalent installation-wide meeting) in accordance with AFI 48-101. (**T-3**)
- 2.12.7. Acts as MTF or ARC medical unit liaison to local/community health department. (**T-2**)
- 2.12.8. When supporting a LSMTF or MAS with no PH officer assigned, oversees the OEH epidemiology and PH aspects of the OEH program at the GSUs or MUNSS sites. (**T-2**) The

level of involvement may range from simple oversight to performing the functions based on the technical expertise of the LSMTF or MAS personnel.

- 2.12.9. Annually assesses program effectiveness by reviewing and reporting OEH performance as required by AFI 48-101 and AFI 90-801 using the methods outlined in **chapter** 5 and **chapter** 6 of this instruction. (**T-1**)
  - 2.12.9.1. Completes PH-specific PMR and presents at OEHWG for incorporation into the overall OEH PMR. (**T-1**)
  - 2.12.9.2. Completes OEH self-assessment communicators in MICT as required locally. **(T-3)**

# 2.13. Installation Occupational and Environmental Medicine Consultant (IOEMC).

- 2.13.1. Appointed in writing by the medical group commander. (**T-2**) Serve as occupational medicine clinic medical director. (**T-2**)
- 2.13.2. Serves as OEHWG chair and approval authority for the OEHWG-recommended clinical MSE requirements, including pregnancy profiles in accordance with AFI 44-102 (this can be delegated to any flight surgeon as needed). (**T-1**)
- 2.13.3. Provides medical oversight for the OEH program. (T-1)
- 2.13.4. Ensures the installation ESOH Council receives an annual (or more frequently as directed) OEH program review that at a minimum includes adverse trends and MSE completion rates. (**T-1**)
- 2.13.5. Determines work relatedness of suspected occupational and environmental illnesses in consultation with the worker, supervisor, BE, PH, FOMC, primary care manager and other appropriate agencies using guidelines in National Institute for Occupational Safety and Health (NIOSH) publication 79-116, *A Guide to the Work-Relatedness of Disease*, or most current edition. (**T-1**) Provider will document his/her comments and work relatedness determination in AFSAS. (**T-1**)
- 2.13.6. Reviews all pregnancy AF Forms 469 (military members) and other pregnancy-related correspondence (for federal civilian employees) to ensure that recommendations made adequately protect the worker and fetus from workplace exposures and that work restrictions, based on medical condition and exposure, are consistently applied. (**T-1**) Specific guidance is outlined in AFI 48-133 and AFI 44-102.
- 2.13.7. Recommends occupational illness and injury claims submissions to the Department of Labor based on work relatedness and to the Social Security Administration regarding disability retirement applications (garrison only). (**T-1**) At ANG installations, the FECA working group or equivalent will make recommendations for submission to the Department of Labor. (**T-1**)
  - 2.13.7.1. Represents the MTF or ARC medical unit at the installation's workers compensation working group, the Installation ESOH Council and/or other DAF forum where OEH illness data are discussed and used to approve or disapprove compensation. (T-1)
  - 2.13.7.2. Leads medical participation in multi-disciplinary forums to reduce military and federal civilian lost workdays and injury rates. (**T-1**)

2.13.8. Reviews and approves occupational "fitness for duty" determination examinations. (**T-1**)

# 2.14. Integrated Operational Support and MTF Physical Therapists (PTs) and Occupational Therapists (OTs).

- 2.14.1. Collaborates with BE to conduct workplace ergonomic assessments and make control recommendations to reduce musculoskeletal injury and illness. (**T-3**) When a unit/workplace has an integrated operational support (IOS) physical therapist (PT) that IOS PT shall be utilized. When a unit/workplace does not have an IOS PT, a MTF PT shall be utilized when available. (**T-3**)
- 2.14.2. Attends the OEHWG, as required, to provide consultation on musculoskeletal injuries and illnesses. (**T-3**)
- **2.15.** Limited Scope Medical Treatment Facility Officer in Charge (OIC). Ensures that LSMTF staff provides OEH support as defined in this instruction to the extent possible within the scope of training, manpower and equipment available. (T-3)
- **2.16.** Geographically Separated Unit Commander or Delegate (Medical Aid Station). Ensures that MAS staff provides OEH support as defined in this instruction to the extent possible within the scope of training, manpower and equipment available. (T-3)

## 2.17. 711th Human Performance Wing, Airman Biosciences Division (711 HPW/RHB).

- 2.17.1. Performs S&T R&D on chemical, physical, and biological occupational and environmental exposures, which includes sensing and sampling technologies, exposure characterization, assessment, effects on human performance, and potential mitigation of exposures. For all research involving human subjects, ensures compliance with Air Force Research Laboratory Instruction 40-402, *Protection of Human Subjects in Research*. (**T-1**)
- 2.17.2. Coordinates with AFMRA/SG3P, MAJCOM/SGs and USAFSAM to establish OEH S&T R&D requirements and priorities. (**T-1**)
- 2.17.3. Communicates results of OEH-related S&T R&D to DAF OEH organizations. (T-1)
- 2.17.4. Collaborates with OEH organization transition agents (organizational entities responsible for incorporating knowledge and/or technology products into an operational capability) and end users to develop and execute knowledge/technology transition plans, strategies, and agreements in accordance with AFI 61-101 and DHA PI 3200.01, *Research and Development (R&D) Enterprise Activity (EA)*. (**T-2**)
- 2.17.5. Provides consultative support on advanced OEH topics at the request of or not otherwise covered by USAFSAM. (T-2)

## 2.18. United States Air Force School of Aerospace Medicine (USAFSAM).

- 2.18.1. Provides OEH consultative and knowledge management services. (T-1)
  - 2.18.1.1. Provides reach back OEH consultative, risk communication, and technical support as requested by SAF/IEE, AFMRA/SG3PB, AF Radioisotope Committee, AF Radiation Safety Committee, and the AOME to assist in assessing and managing DAF and installation OEH programs. (**T-1**)

- 2.18.1.2. Manages the ESOH Service Center to provide 24-hr OEH consultation, risk communication, and technical support for DAF operations. (**T-1**)
- 2.18.1.3. Provides analytical chemistry and related consultative support for DAF OEH surveillance activities. (**T-1**)
- 2.18.1.4. Manages and resources the health risk communication cell. Maintains situational awareness of emerging OEH concerns and provides strategic communication tools (e.g., pamphlets, brochures, talking points, bullet background papers) and in-person attendance to public meetings. (T-1)
- 2.18.1.5. Employs knowledge management principles to track and maintain currency of technical products and guidance. (**T-3**)
- 2.18.1.6. Performs and/or assists with on-site and/or geospatial evaluations, sampling, analysis, health risk assessment and mitigation to support DoD, DAF, MAJCOM and installation OEH programs, as requested. (T-1) Develops and maintains processes to validate and prioritize projects that have DAF-wide impacts and submits to AFMRA/SGP on an annual basis (e.g., combat arms training and maintenance study). (T-2)
- 2.18.1.7. Utilizes DOEHRS and geobase to identify OEH risk reduction and elimination opportunities with DAF-wide significance and evaluates costs/benefits. Presents any courses of action to respective career-field corporate boards or equivalent bodies. (**T-1**)
- 2.18.1.8. Analyzes DAF, MAJCOM and installation OEH data (garrison and deployed locations) to identify significant trends, answer questions/requests and provide annual summary analyses (exposure and outcome based) to the SAF/IE, AF/SG, combatant command air component, MAJCOM/FLDCOM and MTF or ARC medical unit staff. (T-1)
- 2.18.1.9. Recommends DAF, MAJCOM and installation-level OEH program metrics to AFMRA/SG3PB. (**T-1**)
- 2.18.1.10. Maintains OEH program audits using PMAS and develops new audits as approved by AFMRA. (**T-2**)
- 2.18.1.11. Provides standardized recommendations for medical examinations based on exposures most commonly observed among given air force specialty codes (AFSCs). (**T-3**)
- 2.18.1.12. Provides toxicology and OEH technical consultative support to SAF/IE on OSD and DAF emerging chemicals of concern working group in accordance with DoDI 4715.18, *Emerging Chemicals (ECs) of Environmental Concern.* (**T-1**)
- 2.18.1.13. Develops and fields standardized weapon system HRAs for maintenance workplaces for each specific weapon system identified by AFMRA/SG3PB and in coordination with SAF/IEE. (**T-1**)
- 2.18.1.14. Develops and maintains the IH RAM and EH RAM. (T-1)
- 2.18.2. Provides OEH data management services. (**T-1**)
  - 2.18.2.1. Plans, programs, and budgets for resources to execute OEH data management systems including the DOEHRS Support Office, PMAS, PMR and geobase. (**T-1**)

- 2.18.2.2. Serves as the DAF DOEHRS service-level administrator. (T-1)
- 2.18.2.3. Develops and maintains ad hoc reports identified by SAF/IEE, AFMRA, MAJCOMs, or USSF for use with the DOEHRS and geobase systems. (**T-1**)
- 2.18.2.4. Fields, responds to, and tracks questions and user-identified issues with the DOEHRS, geobase, and ad hoc reports and provides reports to AFMRA/SG3PB as requested. (T-1)
- 2.18.2.5. Develops and maintains DOEHRS and geobase user guidance as requested by AFMRA/SG3PB. (**T-1**)
- 2.18.2.6. Performs quality assurance functions for OEH data management systems ensuring data is complete and correct. (**T-1**) Develops data quality reports, identifies concerns and coordinates with MAJCOM/SG staff for corrective action. (**T-1**) Coordinates with SAF/IEE and AFMRA/SG3PB as needed for policy changes and oversight of identified concerns and corrective action. (**T-1**)
- 2.18.2.7. Establishes processes and procedures for records retention and retrieval through a platform accessible by SAF/IEE, AFMRA, MAJCOM/SG staff and mission partners. (**T-1**).
- 2.18.2.8. Maintains a master OEH exposure data repository through the DOEHRS and geobase. (**T-1**)
- 2.18.2.9. Participates in the DOEHRS SFWG and the geobase capability collaboration team and plans and programs for representative attendance at meetings. (**T-3**)
- 2.18.2.10. Serve as AFMRA/SG3PB technical representative to DOEHRS development process to include evaluating and testing system changes. (**T-2**)
- 2.18.3. Provides OEH force development, skills enhancement, and skills verification training. **(T-1)** 
  - 2.18.3.1. Provides AFSC-awarding and advanced OEH program training to members of AOME, including appropriate DOEHRS and geobase training. (**T-1**)
  - 2.18.3.2. Ensures all aspects of OEH training are integrated with DOEHRS data entry and information management training for OEH personnel. (**T-1**)
- 2.18.4. Conducts an annual OEH PMR internal to USAFSAM and provides results to AFMRA/SG3P and SAF/IEE. (**T-1**)

## 2.19. DAF Inspection Agency/Surgeon General (DAFIA/SG).

- 2.19.1. Identifies trends from inspection assessments and briefs respective corporate boards. **(T-1)**
- 2.19.2. When requested by the MAJCOM/FLDCOM, provides medical core team inspectors at each UEI for wings with medical units in accordance with AFI 90-201. (**T-1**)
- 2.19.3. Captures lessons learned/improvements and forwards any recommendations to AFMRA/SGP and SAF/IEE to incorporate into policy changes. (**T-1**)

## 2.20. Injury Compensation Specialist.

- 2.20.1. Performs workers compensation duties in accordance with DoDI 1400.25-V810, *DoD Civilian Personnel Management System: Injury Compensation* to expedite return- to-work and reduce compensation costs. (**T-0**) At ANG installations, this responsibility lies within the state human resources office.
- 2.20.2. Shares appropriate workers compensation data with occupational safety and OEH staff to ensure prevention and reduction of lost workdays. (**T-0**)

## 2.21. Installation Occupational Safety.

- 2.21.1. Develops and implements an installation OSHA reception and action plan according to AFI 91-202. (T-0) Coordinates with MTF stakeholders (BE, PH, SGP, etc.) for occupational health related OSHA events. (T-1)
- 2.21.2. Assists medical personnel in training and obtaining access to AFSAS occupational illness, OSHA events, and hazard management (i.e., RACs) modules. (T-1)
- 2.21.3. Communicates OEH concerns identified during routine safety inspections to BE and PH. (T-1)

# 2.22. Base Civil Engineer.

- 2.22.1. Establishes and maintains processes to ensure design and construction lead personnel involve BE in design review stages (conceptual, intermediate, and final), pre-construction meetings, pre-final, and final inspections to identify and address potential OEH concerns related to new construction and facility modification projects including Medical Facility projects and work orders. (**T-1**)
- 2.22.2. Provides BE access to work orders, drawings, specifications, and contractor submittals related to any real property systems that either produce or are designed to control or reduce OEH hazards (e.g., industrial paint corrosion control booths (blasting and painting), industrial ventilation systems, HVAC systems, noise control devices, changes to drinking water distribution systems). (T-1)
- 2.22.3. Establishes and maintains processes to ensure local geospatial integration office has made contact with and is able to support BE in geographic related concerns and questions related to the OEH of an installation or area of responsibility. (**T-2**)
- 2.22.4. Through the environmental restoration community, identifies, evaluates and addresses contamination to protect human health and the environment in accordance with DAFI 32-7020, *Environmental Restoration Program*; DoDI 4715.07, *Defense Environmental Restoration Program (DERP)*; and, DoDM 4715.20, *Defense Environmental Restoration Program (DERP) Management.* (T-1)
- 2.22.5. Ensures the design, construction, operation, and maintenance of drinking water systems; develops and maintains an adequate supply of safe drinking water; conducts all activities associated with treatment processes (including monitoring and recordkeeping of water parameters as required by regulations); and, ensures the water system has required regulatory permits and sufficient resources to operate in compliance. (**T-0**)

## 2.23. Chief of the Installation Contracting Office.

- 2.23.1. Includes installation-specific OEH program requirements into contracts that have potential health impact to installation personnel in order to comply with all statutes, regulations, and instructions for managing OEH hazards. Any contract requiring inclusion of Federal Acquisition Regulation (FAR) Part 23, *Environment, Energy and Water Efficiency, Renewable Energy Technologies, Occupational Safety, and Drug-Free Workplace* contract clauses, specifically those required by the following subparts, shall be considered as having potential health impact to installation personnel:
  - 2.23.1.1. Subpart 23.3, Hazardous Material Identification and Material Safety Data (T-0)
  - 2.23.1.2. Subpart 23.6, *Notice of Radioactive Material* (**T-0**)
  - 2.23.1.3. Subpart 23.8, Ozone-Depleting Substances and Greenhouse Gases (T-0)
  - 2.23.1.4. Subpart 23.9, Contractor Compliance with Environmental Management Systems (**T-0**)
  - 2.23.1.5. Subpart 23.10, Federal Compliance with Right-to-Know Laws and Pollution Prevention Requirements (T-0)
- 2.23.2. Invites BE to all pre-contract kick-off meetings for construction (to include new construction, building modifications, etc.). (**T-1**)
- 2.23.3. Ensures BE review and approval prior to allowing work to commence on contracts. **(T-1)**

# 2.24. Unit/Organizational Commander.

- 2.24.1. Provides workers a safe and healthy work environment that complies with all OEH program requirements. (**T-0**)
- 2.24.2. Supports installation and organizational level OEH objectives and targets. (T-0)
- 2.24.3. Implements corrective actions for identified OEH discrepancies. (T-1)
- 2.24.4. Ensures employees accomplish initial, periodic, and termination MSE on time in accordance with workplace COHER requirements and report for all scheduled exam requirements. (**T-0**)
- 2.24.5. Appoints a unit health monitor to support coordination of MSE requirements. (T-1)
- 2.24.6. Arranges funding to support non-DHP medical assessments when required by federal law or to meet the needs of the DAF. (**T-0**)
- 2.24.7. Ensures unit personnel are trained on applicable components of the OEH program as described in **paragraph 4.5** of this instruction. (**T-0**)
- 2.24.8. Serves as the validator, or delegates within the unit, for all occupational health related self-assessment communicators assigned. (**T-3**)

## 2.25. Unit Health Monitor.

2.25.1. Notifies unit personnel of due/overdue MSE requirements and monitors MSE status in coordination with unit commanders (CCs), workplace supervisors and PH. (**T-1**)

2.25.2. Coordinates with workplace supervisors and unit/organizational commanders to develop a process for tracking the scheduling and completion of required MSEs and training, when OEH requirements and program oversight are provided by sister-service components. (T-3)

## 2.26. Workplace Supervisor.

- 2.26.1. Ensures all OEH hazards are abated to the maximum extent possible and that all Airmen and Guardians comply with OEH requirements. (**T-0**)
- 2.26.2. Ensures required OEH hazard controls are implemented and functioning correctly; PPE is available, used correctly in the workplace, and personnel are trained on the appropriate use and care of PPE. (**T-0**)
- 2.26.3. Ensures workplace compliance with applicable OEH regulatory and policy requirements. (**T-0**)
- 2.26.4. Informs BE, PH, Safety and/or preventive medicine of changes to workplace equipment, practices and/or procedures that may impact exposure to OEH hazards as soon as possible, but no later than 30 days. (**T-1**)
- 2.26.5. Conducts workplace-specific OEH hazard training, per regulatory or policy requirements; (**T-0**) documents training in accordance with AFI 91-202. (**T-1**)
- 2.26.6. Consults with PH and/or BE to ensure OEH hazard training meets or exceeds minimum requirements. (**T-2**)
- 2.26.7. Ensures personnel complete required MSEs. (**T-0**)
  - 2.26.7.1. Ensures that pre-placement medical examinations are completed before placing the individual to work (if possible) and no later than 60 days after starting work (unless governed by more stringent Code of Federal Regulations (CFR) requirements) and that post-placement examinations are completed when the employee terminates work activities. (T-0)
  - 2.26.7.2. Notifies PH of members separating or retiring so that appropriate termination examinations can be completed. (**T-0**)
  - 2.26.7.3. Attends in person or have a knowledgeable representative attend the OEHWG review of their workplace MSE requirements when invited to participate. (**T-3**)
- 2.26.8. Maintains accurate rosters of personnel assigned to the workplace and SEG in the occupational health supervisor module in ASIMS by:
  - 2.26.8.1. Updating rosters upon new employee arrival/in-processing duty section. (T-2)
  - 2.26.8.2. Requesting to remove (archive) personnel during employee out-processing or change in duty section. (**T-2**)
  - 2.26.8.3. Validating rosters every 3 months at a minimum. (T-2)
- 2.26.9. Ensures the injury compensation specialist, BE, PH, and/or preventive medicine are informed promptly about each job-related exposure, illness and pregnancy (if notified by worker). (**T-0**)

- 2.26.10. Supports the OEH hazard identification and exposure/health risk assessment process by ensuring active engagement of personnel with OEH professionals evaluating the workplace. (T-3)
- 2.26.11. Completes applicable OEH self-assessment communicators in MICT and forwards any findings and/or issues/concerns to BE. (**T-1**).

## 2.27. Employee.

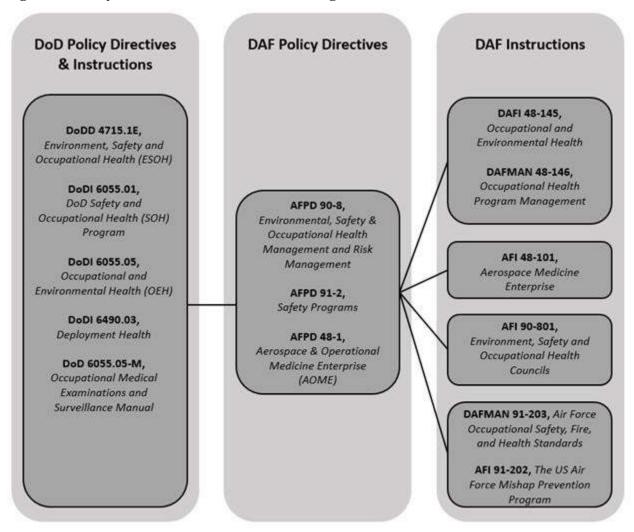
- 2.27.1. Understands OEH aspects of work performed and complies with all OEH risk mitigation strategies and program requirements, including training, work practices and the proper use, maintenance and storage of PPE. (**T-0**)
- 2.27.2. Schedules all MSE requirements before they become overdue and reports on time for scheduled MSE appointments. (**T-3**)
- 2.27.3. Reports changes that may impact exposure to OEH hazards to the appropriate supervisor; actively participates in workplace health hazard identification and health risk assessments, to include wearing sampling/monitoring equipment. (**T-0**)
- 2.27.4. Reports to supervisors and medical authority any occupationally related exposures or health conditions, and seeks medical care as required. (**T-1**)
- 2.27.5. Notifies PH upon learning of pregnancy. (**T-1**, applicable to military personnel only, optional for federal civilian employees)

## Chapter 3

#### **PLANNING**

- **3.1. Overview.** The planning process identifies and prioritizes OEH program issues (hazards, risks, program deficiencies and opportunities for improvement) to establish objectives, identify risk reduction opportunities and ensure OEH program improvement. DAF OEH program policy articulates senior leadership's vision for the OEH program. Health risk assessments, compliance sampling, and other requirements should be identified and tracked to completion.
- **3.2. Supporting Policy Elements.** OEH policy and guidance consists of both directive and non-directive documents issued at all levels and is incorporated into the 10-, 32-, 40-, 48-, 90- and 91-series of publications, reflecting the cross-functional elements of the OEH program. The most critical elements of the DAF OEH program are contained in 90-series and 48-series publications, as illustrated in **Figure 3.1** These documents are supported by DAFIs, DAFMANs, and other policy instruments to establish and maintain all the key compliance, risk reduction and continual improvement elements of the OEH program. These supporting documents (e.g., DAFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, DAFMAN 48-146) provide the "how to" instructions to implement the policy directives and program requirements. MAJCOM and installation-level supplements to these documents may be published as needed to address organization-specific aspects of the OEH program.

Figure 3.1. Key Elements of the DAF OEH Program.



## Chapter 4

#### **EXECUTION**

- **4.1. Overview.** The OEH program includes six key elements to ensure successful execution and continuous improvement. The following paragraphs describe how commanders, supervisors and employees shall partner with medical personnel in executing these elements to achieve future goals and objectives. See DAFMAN 48-146 for specific details on how medical personnel execute these elements of the OEH program.
- **4.2. Design Review and Change Management.** Effective change management prevents OEH-related injuries and illnesses by identifying hazards and associated risks before they are introduced into the workplace or community environment.
  - 4.2.1. Workplace supervisors shall request BE (with the assistance from other AOME functional experts) review OEH design and process changes, including but not limited to the following activities: design, construction, operation, maintenance, and decommissioning. (T-1)
  - 4.2.2. The following are examples of conditions that should trigger a review: new or modified technology, equipment, or facilities; new or revised procedures, work practices, or design specifications; different types and grades of materials; significant changes to the workplace's organizational structure and staffing including use of contractors; modification of health and safety devices and equipment; building occupant or base community complaints; medical trends and new or revised health and safety standards or guidelines.

#### 4.3. OEH Assessments.

- 4.3.1. Purpose. OEH assessments enhance overall mission effectiveness by protecting DAF personnel from OEH hazards and risks. OEH assessments provide a framework to:
  - 4.3.1.1. Communicate and coordinate control options, mitigation actions and follow-up monitoring with all stakeholders. (**T-0**)
  - 4.3.1.2. Evaluate the effectiveness of control options designed to minimize OEH-related exposure. (**T-0**)
  - 4.3.1.3. Accurately document potential OEH exposure(s) and exposure pathway assessments to ensure an accurate exposure record in ILER for all DAF personnel. (**T-0**)
  - 4.3.1.4. Ensure commanders are aware of applicable federal, state or host-nation, and local regulations, standards and requirements, as applicable. (**T-0**)
  - 4.3.1.5. Proactively identify OEH hazards and exposure pathways using current process knowledge and geospatial data (geobase) and mitigate the hazards before a reactive approach to the OEH hazards becomes necessary. (**T-2**)
- 4.3.2. Unit commanders and workplace supervisors shall coordinate with BE to complete unit OEH assessments using the detailed guidance in DAFMAN 48-146 at the following minimum frequency:

- 4.3.2.1. Within 30 days of changes to workplace equipment/practices/procedures, notification of a worker health complaint or identification of a new occupational or environmental health concern. (**T-2**)
- 4.3.2.2. Every 12 months for high-risk processes with one or more hazardous exposures above an action level (**Exception:** hazardous noise). (**T-0**)
- 4.3.2.3. Every 36 months for a comprehensive HRA utilizing the IH RAM. (**T-2**) These HRAs shall be scheduled and executed as a unit assessment (e.g., squadron). (**T-3**)
- 4.3.3. Unit commanders shall receive an out-brief and written report from BE and/or PH after completion of the unit comprehensive HRA. (**T-3**)
- 4.3.4. Unit commanders, workplace supervisors, facility managers and mission owners shall monitor, report and track any identified deficiencies until closure. (**T-1**)
- 4.3.5. Unit OEH assessments are not an IG-led process but BE may coordinate assessment schedules with the installation gatekeeper per AFI 90-201. Additionally, assessments may include OEH program data found in the commander's inspection program (CCIP) in accordance with AFI 90-201. BE are encouraged to use information from the CCIP as part of OEH assessments (e.g., OEH shop level communicator responses) and share significant OEH discrepancies identified during OEH assessments with the wing IG for validation and inclusion in the Inspector General Evaluation Management System (IGEMS).

## 4.4. Occupational and Environmental Health Clinical Surveillance.

- 4.4.1. The objective of OEH clinical surveillance is to protect DAF workers from adverse exposures by detecting potential failure in controlling exposure(s). A secondary objective is to protect DAF workers by detecting disease at or before the point it becomes clinically evident.
- 4.4.2. Occupational medicine. Occupational medicine supports DAF mission objectives by helping optimize workforce availability and the OEH program with direct clinical functions (tertiary preventive medicine) and illness prevention activities (primary and secondary prevention). This is accomplished through the performance of all occupational medical examinations (MSE, fitness for duty, Pre-placement, Injury/Illness, and Termination) in accordance with Title 29, CFR, Part 1910, Occupational Safety and Health Standards, DoDM 6055.05-M, Occupational Medical Examinations and Surveillance Manual and DAFMAN 48-146.

## 4.5. Education and Training.

- 4.5.1. Unit/organizational commanders will ensure general OEH awareness training is provided to all personnel (military and federal civilian). The job safety training outline (JSTO) is the primary means for OEH training and must include the workplace-specific hazard communication (HAZCOM) training provided in accordance with AFI 90-821, *Hazard Communication (HAZCOM) Program*. Additionally, BE OEH assessment reports must be available to all employees. Organizational commanders will periodically evaluate the effectiveness of OEH training including hazard identification, safe work practices, use of PPE, and other OSHA required training identified by BE or PH. (**T-0**)
- 4.5.2. OEH program training will be documented on AF Form 55, *Employee Safety and Health Record*, in the integrated maintenance data system or in other AF-approved systems that track/verify training is accomplished. (**T-0**)

- **4.6. Emergency Preparedness.** Installations will plan for and develop procedures to prevent and/or respond to foreseeable emergencies, natural and man-made, applicable to their workplace operations in accordance with presidential directives. Emergency response incidents will be assessed for environmental health hazards and documented appropriately in DOEHRS by the installation BE utilizing global positioning system (GPS) coordinates for integration in geobase if appropriate. (**T-0**)
- **4.7. Documentation.** Installations shall follow AFI 33-322 to establish and maintain an effective OEH records management program. (**T-1**) Those responsible for managing OEH documents and records will maintain strict compliance with the requirements of 29 CFR Part 1904, *Recording and Reporting Occupational Injuries and Illness* and 29 CFR § 1910.1020, *Access to Employee Exposure and Medical Records*. Personnel will be briefed and provided access to their personal exposure records and workplace evaluations by their supervisor and copies of records will be provided upon request. (**T-0**)

## Chapter 5

## MEASUREMENT AND ASSESSMENT

- **5.1. Performance Indicators.** An effective monitoring and assessment program can identify significant deviations from "steady-state" OEH program performance. This may provide early indications the OEH program is not performing at optimum effectiveness and efficiency.
  - 5.1.1. MAJCOMs and installations shall track operational performance using established HAF performance indicators including,
    - 5.1.1.1. OEH program indicators defined in AFI 48-101. (T-0)
    - 5.1.1.2. Performance measures and goals defined in the HAF OEH PMR tool approved by AFMRA/SG3P. (**T-0**)
  - 5.1.2. MAJCOMs and installations may also develop and adopt OEH performance measures designed to achieve MAJCOM and installation unique objectives and targets.
    - 5.1.2.1. Measures should be designed according to the hazards in the workplace. Examples include the reduction of average exposure levels, the rate and timeliness of completion of corrective actions, completion of required training to include demonstration of employee knowledge.
- **5.2. Quality Measures.** OEH exposure documentation in DOEHRS is now directly feeding Airmen and Guardian's health records in the ILER system used by DoD and Department of Veteran's Affairs medical providers to aid in clinical diagnosis and treatment of OEH illness and injuries. Installation OEH programs shall apply the AFMS *Trusted Care Concept Of Operations* to identify ways to improve the quality of OEH exposure documentation. **(T-1)** 
  - 5.2.1. Installation OEH programs shall track OEH program quality using established HAF quality measures identified in AFMRA/SG3PB policy memos and when available, the webbased HAF OEH PMR tool developed by USAFSAM. (**T-1**)
  - 5.2.2. Installation OEH programs shall use the quality assurance tools and reports developed by USAFSAM (DERGS, Business Object Reports, RAM, etc.) for targeted improvement in programs not meeting HAF data quality goals. (T-1)
- **5.3. Assessment.** BE flight commanders shall conduct OEH program audits using PMAS at least once per fiscal year to meet the unit self-assessment requirement defined in AFI 90-201, see **paragraph 2.11.8.2**. **(T-2)** Programs without a PMAS audit shall be periodically assessed using locally developed tools. OEH program managers shall work with MTF leadership to develop a process to communicate identified non-compliance to the appropriate commander as part of the commander's inspection program. **(T-1)** PMAS audits should be leveraged to identify areas for improvement, prioritize existing resources, request additional/new resources and as a teaching tool for new program managers.
- **5.4. Feedback to the Planning Process.** The results of monitoring, measurement and assessment activities, including audits, incident investigations and corrective and preventive actions, are used to inform the planning process and the management review.

## Chapter 6

#### MANAGEMENT REVIEW

- **6.1. Purpose.** The PMR allows for leadership at HAF, MAJCOM and installation-level, along with OEH program leaders and process owners, to critically evaluate OEH program performance and implement improvements. HAF, MAJCOM, and installation ESOH Councils (or equivalent) shall ensure an OEH PMR is conducted at each level at least annually. (**T-1**) **Exception:** ARC units without full time staff or a HTSA may request the OEH PMR be completed by MAJCOM/FLDCOM/SG staff to include paragraphs **6.2.4-6.2.8** and **paragraph 6.2.11** at a minimum.
- **6.2. Annual PMR.** HAF/MAJCOM/Installation OEH program managers shall conduct an annual PMR once per fiscal year (FY). (T-1) Each installation will forward their OEH PMR to the MAJCOM. (T-1) MAJCOM/FOA/DRU level will forward their OEH PMR to AFMRA/SG3P. AFMRA/SG3P will consolidate MAJCOM/FOA/DRU OEH PMRs into a consolidated DAF-level PMR for submission to SAF/IEE. Minimum requirements of the annual PMR include:
  - 6.2.1. Executive Summary. (T-1)
  - 6.2.2. OEH goals, objectives and priorities for the following FY. (T-0)
  - 6.2.3. Analysis of the prior FY's goals, objectives, and priorities; identify areas of success and areas needing additional work. (**T-0**)
  - 6.2.4. Percent of required unit OEH assessments completed. (T-0)
  - 6.2.5. Occupational illness trends and corrective actions. (T-1)
  - 6.2.6. OEHME compliance and significant findings. (**T-0**)
  - 6.2.7. Hearing loss rates (e.g., significant threshold shifts and permanent threshold shifts) and significant findings. (**T-0**)
  - 6.2.8. Number of OSHA or Nuclear Regulatory Commission Notice of Violations, status and corrective actions. (**T-0**)
  - 6.2.9. Summary of results, deficiencies, and corrective actions from PMAS audits and CCIP /UEI reports conducted in accordance with AFI 90-201. (**T-1**)
  - 6.2.10. Summary of open health risk assessment codes (1-3) and average time to abate hazard. (**T-0**)
  - 6.2.11. Summary of completed exposure pathways assessed as extremely high, high, and medium and average time to mitigate risk. (**T-1**)
- **6.3. Outcome and Follow-Up.** Senior leadership at all levels will provide appropriate direction for correcting noted deficiencies, including the need for investment, policy revision and adjustments to objectives and targets. Performance measures will be reviewed during the ESOH Council or equivalent for appropriateness and relevance, and adjusted as necessary to drive

performance toward established OEH program objectives and targets. The PMR must be documented in accordance with the template provided by AFMRA. (**T-1**)

ROBERT I. MILLER Lieutenant General, USAF, MC, SFS Surgeon General

### **Attachment 1**

## GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION

## References

29 CFR Part 1904, Recording and Reporting Occupational Injuries and Illnesses

Executive Order 12196, Occupational Safety and Health Programs for Federal Employees

NSTC/PRD-5 Presidential Review Directive 5, *Improving the Health of Our Military, Veterans, and Their Families* 

DoDD 4715.01E, Environment, Safety, and Occupational Health (ESOH), 19 March 2005

DoDI 4715.05, Environmental Compliance at Installations Outside the United States, 1 November 2013, IC2 31 August 2018

DoDI 4715.07, Defense Environmental Restoration Program (DERP), 21 May 2013

DoDI 4715.08, Remediation of Environmental Contamination Outside the United States, 1 November 2013

DoDI 4715.18, Emerging Chemicals (ECs) of Environmental Concern, 4 September 2019

DoDI 6055.05, Occupational and Environmental Health (OEH), 11 November 2008

DoDI 6490.03, Deployment Health, 19 July 2019

DoDI 1400.25, DoD Civilian Personnel Management System, Vol 810, Injury Compensation, 12 April 2005

DoDM 4715.20, Defense Environmental Restoration Program (DERP) Management, 9 March 2012

DoDM 6055.05-M, Occupational Medical Examinations and Surveillance Manual, 2 May 2007

HAFMD 1-48, The Air Force Surgeon General, 7 May 2015

HAFMD 1-18, Assistant Secretary of the Air Force (Installations, Environment and Energy), 10 July 2014

AFPD 48-1, Aerospace & Operational Medicine Enterprise (AOME), 7 June 2019

AFPD 90-8, Environmental, Safety, and Occupational Health Management and Risk Management, 23 December 2019

AFPD 91-2, Safety Programs, 3 September 2019

AFI 10-2501, Emergency Management Program, 10 March 2020

AFI 25-201, Intra-Service, Intra-Agency, and Inter-Agency Support Agreement Procedures, 18 October 2013

AFI 32-6000, Housing Management, 18 March 2020

DAFI 32-7020, Environmental Restoration Program, 12 March 2020

AFI 32-7001, Environmental Management, 23 August 2019

AFI 33-322, Records Management and Information Governance Program, 28 July 2021

AFI 44-102, Medical Care Management, 17 March 2015

AFI 48-101, Aerospace Medicine Enterprise, 8 December 2014

AFI 48-133, Duty Limiting Conditions, 07 August 2020

AFI 61-101, Management of Science and Technology, 14 March 2013

AFI 63-101/20-101, Integrated Life Cycle Management, 30 June 2020

AFI 90-201, The Air Force Inspection System, 20 November 2018

AFI 90-801, Environment, Safety, and Occupational Health Councils, 9 January 2020

AFI 90-802, Risk Management, 1 April 2019

AFI 90-821, Hazard Communication (HAZCOM) Program, 13 May 2019

AFI 91-202, US Air Force Mishap Prevention Program, 12 March 2020

DAFI 91-204, Safety Investigations and Reports, 10 March 2021

AFMAN 21-200, Munitions and Missile Maintenance Management, 9 August 2018

AFMAN 32-7002, Environmental Compliance and Pollution Prevention, 4 February 2020

DAFMAN 48-146, Occupational Health Program Management, September 2022

DAFMAN 90-161, Publishing Processes and Procedures, 15 April 2022

DAFMAN 91-203, Air Force Occupational Safety, Fire, and Health Standards, 25 March 2022

AFTTP 3-2.82\_IP, Occupational and Environmental Health Site Assessment, April 2012

CJCSI 5123.01I, Charter of the Joint Requirements Oversight Council and Implementation of the Joint Capabilities Integration and Development System, 30 October 2021

DHA PI 3200.01, Research and Development (R&D) Enterprise Activity (EA), 9 August 2019

DHA PI 6490.03, Deployment Health Procedures, 17 December 2019

Office of the AF Surgeon General. Trusted Care Concept of Operations, October 2015

FAR Part 23, Environment, Energy and Water Efficiency, Renewable Energy Technologies, Occupational Safety, and Drug-Free Workplace.

Air Force Research Laboratory Instruction 40-402, *Protection of Human Subjects in Research*, 21 April 2016

OSHA Injury and Illness Recordkeeping and Reporting Requirements webpage: <a href="https://www.osha.gov/recordkeeping/index.html">www.osha.gov/recordkeeping/index.html</a>

NIOSH Publication 79-116, A Guide to the Work Relatedness of Disease, January 1979

AIHA Publication A Strategy for Assessing and Managing Occupational Exposures, 4th Ed.

USAFSAM Fact Sheet, Substantial Impact to Human Health and Safety Determination Factsheet, 01 January 2021

## Adopted Forms

AF Form 55, Employee Safety and Health Record

AF Form 190, Occupational Illness/Injury Report

AF Form 332, Base Civil Engineer Work Request

AF Form 469, Duty Limiting Condition Report

AF Form 813, Request for Environmental Impact Analysis

AFTO Form 22, Technical Manual (TM) Change Recommendation and Reply

DAF Form 847, Recommendation for Change of Publication

## Abbreviations and Acronyms

**AFI**—Air Force Instruction

**AFMAN**—Air Force Manual

**AFMRA**—Air Force Medical Readiness Agency

**AFMS**—Air Force Medical Service

**AFPD**—Air Force Policy Directive

**AFRC**—Air Force Reserve Command

**AFSAS**—Air Force Safety Automated System

**AFSC**—Air Force Specialty Code

**AIHA**—American Industrial Hygiene Association

**AMC**—Aerospace Medicine Council

ANG—Air National Guard

**AOME**—Aerospace & Operational Medicine Enterprise

**ARC**—Air Reserve Component

**ASIMS**—Aeromedical Services Information Management System

**ATSDR**—Agency for Toxic Substances and Disease Registry

**BE**—Bioenvironmental Engineering

**CCDR**—Combatant Commander

**CCIP**—Commander's Inspection Program

**CFR**—Code of Federal Regulations

**CJCSI**—Chairman of the Joint Chiefs of Staff Instruction

**COHER**—Clinical Occupational Health Exam Requirements

**DAFI**—Department of the Air Force Instruction

**DAFIA**—Department of the Air Force Inspection Agency

**DAFMAN**—Department of the Air Force Manual

**DASHO**—Designated Agency Safety and Health Officer

**DERG**—Data Entry and Report Guide

**DHA**—Defense Health Agency

**DHP**—Defense Health Program

**DoD**—Department of Defense

**DoDD**—Department of Defense Directive

**DoDI**—Department of Defense Instruction

**DOEHRS**—Department of Defense Occupational & Environmental Health Readiness System

ESOH—Environment, Safety, and Occupational Health

**FAR**—Federal Acquisition Regulations

FECA—Federal Employees' Compensation Act

**FH**—Family Housing

FLDCOM—Field Command

FUB—Facility Utilization Board

**FY**—Fiscal Year

**GPS**—Global Positioning System

**GSU**—Geographically Separated Unit

**HAF**—Headquarters Air Force

**HAZCOM**—Hazard Communication

**HMMP**—Hazardous Material Management Process

**HRA**—Health Risk Assessment

**HTSA**—Host Tenant Support Agreement

**IGEMS**—Inspector General Evaluation Management System

ILER—Individual Longitudinal Exposure Record

**IOEMC**—Installation Occupational & Environmental Medicine Consultant

**IOS**—Integrated Operational Support

JSTO—Job Safety Training Outline

LSMTF—Limited Scope Medical Treatment Facility

**MAJCOM**—Major Command

MAS—Medical Aid Station

MHAP—Master Hazard Abatement Plan

**MHPI**—Military Housing Privatization Initiative

**MICT**—Management Internal Control Toolset

MSE—Medical Surveillance Exam

**MTF**—Medical Treatment Facility

MUNSS—Munitions Support Squadron

NIOSH—National Institute for Occupational Safety and Health

**OEH**—Occupational & Environmental Health

**OEHED**—Occupational & Environmental Health Exposure Data

**OEHSA**—Occupational & Environmental Health Site Assessment

**OEHWG**—Occupational & Environmental Health Working Group

**OCONUS**—Outside the Continental United States

**OSD**—Office of the Secretary of Defense

**OSHA**—Occupational Safety and Health Administration

**OT**—Occupational Therapy

**PAR**—Population at Risk

**PH**—Public Health

**PMAS**—Program Maturity Audit System

**PMR**—Program Management Review

**POEMS**—Periodic Occupational and Environmental Monitoring Summaries

**PPBE**—Planning, Programming, Budgeting, and Execution

**PPE**—Personal Protective Equipment

**PT**—Physical Therapy

**R&D**—Research and Development

RAC—Risk Assessment Code

**RAM**—Risk Assessment Methodology

**RM**—Risk Management

**S&T**—Science and Technology

**SEG**—Similar Exposure Group

**SFWG**—Service Functional Working Group

**SG3PB**—Bioenvironmental Engineering Branch within AFMRA

SIHS—Substantial Impact to Human Health and Safety

**SOH**—Safety and Occupational Health

**UEI**—Unit Effectiveness Inspection

**UH**—Unaccompanied Housing

**USAFSAM**—United States Air Force School of Aerospace Medicine

**USSF**—US Space Force

VA—Veterans Affairs

#### **Terms**

**DAF Federal Civilian**—A civilian federal employee of the DAF: senior executive service (SES), general manager (GM), general schedule (GS), and federal wage system (FWS) employees, including ANG and USAFR technicians; scientific and technical; laboratory demonstration; administratively determined; US citizen employees in Panama; non-appropriated fund employees; youth and student assistance program employees; and foreign nationals employed by the DAF under a direct or indirect hire arrangement. **Note**: Excludes Army-Air Force Exchange Service (AAFES), Defense Commissary Agency (DeCA), and Defense Finance and Accounting Service (DFAS) employees.

**DAF Military**—All military members in the DAF to include the US Air Force; US Space Force; Air National Guard and Air Force Reserve personnel on active duty or in drill status; US Air Force Academy cadets; Reserve Officers' Training Corps cadets when engaged in directed training processes; and foreign national military personnel assigned to the US Air Force.

**DAF Worker**—Collective group comprised of DAF military and Federal civilian personnel.

Clinical Surveillance—The process by which workers receive occupational & environmental health medical examinations, which are designed and conducted, based on an assessment of workers' identified OEH risks. The results of these examinations are analyzed to determine if DAF operations are adversely affecting the health of the workers. Clinical surveillance is also required in specific instances to meet OSHA requirements for medical monitoring. Additionally, clinical surveillance can be used to assess the adequacy of protective measures.

**Environmental Health**—Assessing, understanding and controlling the impacts of people on their environment (air, water, soil) and the impacts of the environment on the people.

**Exposure**—The intensity, frequency, and length of time personnel are subject to a hazard. [Source DoDI 6055.05]

**Exposure Assessment**—A qualitative or quantitative determination of the exposure to one or more occupational and environmental health hazards experienced by a specific PAR or SEG, or an individual; determination can be based on a variety, or combination, of exposure measurement methods to include personal exposure monitoring including, but not limited to, personal biomarkers, unit-level or SEG exposure monitoring, area monitoring (e.g., environmental sampling), extrapolation of monitoring from similar settings, and/or mathematical exposure modeling or simulations; the sophistication of the exposure assessment is contingent upon available time, measurement technology, and the level of technical expertise of the personnel performing the exposure assessment

**Exposure Guideline**—An exposure concentration of an occupational and environmental health hazard for individuals, units, or SEGs that is related to a specified health or operational impact, or

the avoidance of such impacts; exposure guidelines support nearly all kinds of risk assessment activities; whereas, exposure limits are used specifically to support compliance decisions. Examples include: operational exposure guidelines (OEGs), military exposure guidelines (MEGs), acute emergency guideline levels (AEGLs), emergency exposure guidance level (EEGLs), and short-term public emergency guidance level (SPEGLs).

**Exposure Limit**—The concentration and/or duration of exposure to an occupational and environmental health hazard to which individuals, or SEGs, may be exposed without triggering a compliance-related risk management action. Usually such limits are based fully, or in part, on the expectation of avoiding the development of any adverse health outcomes within the exposed population, see also occupational exposure limit.

**Exposure Pathway**—The five components that provide exposure to the population at risk: (1) source, (2) environmental medium, (3) health threat, (4) route of exposure, and (5) population affected. An exposure pathway is prioritized as "urgent" when the potential health risk indicates immediate action as soon as possible. A "high" priority indicates the potential health risk requires rapid action.

**Geobase**—Commissioned July 2001, supports the DAF CE mission by providing accurate, current, and timely satellite and aerial imagery and map data representing real-world features and conditions for DAF installations, ranges and property. Geobase strives to support DAF missions by providing installation geospatial information and services. Committed and trained personnel as well as advanced information technology infrastructure enable these services.

**Health Risk Assessment (HRA)**—Application of professional judgment (fully qualified BE officer, civilian industrial hygienist, or BE Craftsman (4B071)) based on qualitative and quantitative information such as exposure measurements and estimates, mathematical modeling, and/or observations of work practices to identify and assess chemical, physical and biological health hazards.

**Limited Scope Medical Treatment Facility (LSMTF)**—LSMTFs are medical elements, flights, or small medical squadrons with a credentialed medical provider that do not provide the scope of services found in a medical group. LSMTFs are typically assigned to a line squadron or group (e.g., air base squadron, mission support group or air base group). In some cases, a LSMTF may report directly to a wing or MAJCOM.

Individual Longitudinal Exposure Record (ILER)—A web based application that provides DoD and Veterans Administration (VA) the ability to link an individual to exposures to improve the efficiency, effectiveness and quality of health care. It is designed to assist clinicians, researchers/epidemiologists and benefit advisors to link exposure data from DoD to assist Veterans. ILER compiles data from various information systems to create a comprehensive record of all OEH exposures for a full working lifetime for DoD personnel. While DOEHRS is a primary source used to populate ILER, other DoD systems also provide supporting data (e.g., Military Exposure Surveillance Library, Defense Medical Surveillance System, Defense Manpower Data Center, Medical Data Repository, various registries)

**Longitudinal Exposure Record**—A comprehensive record of all occupational and environmental exposures for a full working lifetime; applies to all DoD personnel.

**Medical Aid Station (MAS)**—A small medical element without a credentialed medical provider and typically located at a GSU or MUNSS site.

Munitions Support Squadron (MUNSS)—A geographically separated unit responsible for receipt, storage, maintenance and control of United States War Reserve Munitions in support of the North Atlantic Treaty Organization and its strike missions. See AFMAN 21-200.

**Objectives**—Objectives are derived from program goals and are well-defined, specific and quantifiable statements of the desired results of the program.

Occupational and Environmental Health Site Assessment (OEHSA)—The OEHSA is the key operational health tool for producing data or information used for health risk assessments (HRA) and to satisfy OEH surveillance requirements. OEHSAs focus on collecting site-specific data to identify potential or actual exposure pathways during bed down, employ, and sustainment of air and space forces.

**Occupational Exposure Limit (OEL)**—The OEL in the Air Force is the most conservative limit between the OSHA Permissible Exposure Limit (PEL) or American Conference of Governmental Industrial Hygienist-Threshold Limit Values (ACGIH-TLVs) unless a specific OEL is designated by the BE Associate Corps Chief on the BE MilSuite and ESOH Service Center.

**OEH-Related Illness or Injury**—A suspected or confirmed adverse health event caused or aggravated by employment as described in Occupational Injury and Illness Reporting Guidelines for Federal Agencies (OMB 1200-0029). OEH-related illness or injury also includes biological changes indicative of overexposure to a hazard.

**Physical Hazard**—Physical hazards include ergonomic hazards, radiation, heat and cold stress, vibration hazards, and noise hazards.

**Population at Risk**—The population or a subset of the population that is at risk of experiencing an event or being exposed to a health threat during a specified period and at a specified location.

**Process**—Any item of work or situation that may pose a risk and may require evaluation and control; the lowest level of work that may require evaluation to assess exposure and associated controls. Not all processes are associated with a physical location, e.g., working near the flight line may constitute a process. The terms activity and process are synonymous.

**Risk Assessment Methodology**—A required business practice and collection of tools designed to streamline and standardize the risk assessment process through accurate and relevant data entry. The RAM is designed to help identify and eliminate data gaps, provide relevant and defendable data, develop a high confidence in hazard characterizations, and facilitate optimal OEH program management.

**Targets**—The specific target values for performance measures designed to measure progress towards established objectives (e.g., reduce occupational illness by 2% over previous FY.)

**Unit Health Monitor**—An individual appointed by the unit commander to ensure that medical surveillance exams are scheduled and completed by individuals in their organization in a timely manner, and communicates the status of medical exams completion to the commander, supervisors in the organization and to PH.

**Vapor Intrusion**—The migration of vapor-forming chemicals from any subsurface source into an overlying building.

**Workplace**—Any occupational environment where a potential OEH exposure may occur. A workplace may be administrative, industrial, or all encompassing (e.g., any setting where an OEH exposure may occur while deployed.)