

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

AIR FORCE MANUAL

32-7002



4 FEBRUARY 2020

Civil Engineering

**ENVIRONMENTAL COMPLIANCE AND
POLLUTION PREVENTION**

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: AF/A4CA

Certified by: SAF/IE
(Mr. John W. Henderson)

Supersedes: AFI 32-7040, 4 November
2014; AFI 32-7042, 7
November 2014; AFI 32-
7086, 4 February 2015,
AFMAN 32-7089, 4
November 2016, AF Form
3952

Pages: 104

This manual implements Air Force Policy Directive (AFPD) 32-70, *Environmental Considerations in Air Force Programs and Activities*, and Air Force Instruction (AFI) 32-7001, *Environmental Management*. This Air Force Manual (AFMAN) applies to all civilian employees and uniformed members of the Regular Air Force (RegAF), Air Force Reserve (AFR), and Air National Guard (ANG) reserve components; it also applies to the installations supported by the Air Force Reserve Command (AFRC), the Air National Guard (ANG), Primary Subordinate Units not located on AF installations; also to Government-Owned, Contractor Operated (GOCO) facilities, Direct Reporting Units (DRUs), and Air Force Reserve (AFR) units/bases. This AFMAN applies to all Air Force installations worldwide, but it does not apply directly to contingency (i.e., non-enduring) locations outside the U.S, although is a good source for non-directive information. See AFI 32-7091, *Environmental Management Outside the United States*, for additional environmental guidance for overseas installations. The Air National Guard Readiness Center (ANGRC) and AFRC, may supplement this manual. All supplements must be routed to the Office of Primary Responsibility (OPR) of this publication for coordination prior to certification and

approval. Unless otherwise noted, portions of this AFMAN apply to all enduring installations outside the United States so long as such application is consistent with international agreements and does not conflict with applicable host nation final governing standards or Department of Defense (DoD) 4715.05-G, *Overseas Environmental Baseline Guidance Document*. Refer recommended changes and questions about this publication to the Office of Primary Responsibility (OPR) using the AF Form 847, *Recommendation for Change of Publication*; route AF Form 847 from the field through the appropriate functional chain of command. The authorities to waive wing/unit level requirements in this publication are identified with a Tier (T-0, T-1, T-2, or T-3) number following the compliance statement. See AFI 33-360, *Publications and Forms Management*, 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 requestors immediate commander for non-tiered compliance items. Ensure all records created as a result of the processes prescribed in this publication are maintained in accordance with Air Force Manual 33-363, *Management of Records*, and disposed of in accordance with Air Force Records Disposition Schedule located in the Air Force Records Information Management System. This manual requires the collection and or maintenance of information protected by Title 5 United States Code (USC) Section (§) 552a, The Privacy Act of 1974 authorized by 42 USC §§ 7401-7671q, *Clean Air Act* and 42 USC § 7418, *Control of pollution from Federal Facilities*. The applicable System of Record Notice Environmental Protection Agency-GOVT-1, *Emissions Inspection and Maintenance Records for Federal Employees Parking at Federal Parking Facilities*, is available at: <http://www.epa.gov/privacy/notice/epa-govt-1.htm>, or <https://www.epa.gov/privacy/privacy-act-system-records-emissions-inspection-and-maintenance-records-federal-employees>. 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 (AF).

Chapter 1—INTRODUCTION	6
1.1. Overview.	6
1.2. Scope.	6
1.3. Statutes and Regulations.	6
1.4. Environmental Management System (EMS).	8
Chapter 2—ROLES AND RESPONSIBILITIES	9
2.1. Deputy Assistant Secretary of the Air Force for Environment, Safety, and Infrastructure (SAF/IEE).	9
2.2. The General Counsel of the Department of the Air Force (SAF/GC), through the Deputy General Counsel for Installations, Energy and Environment (SAF/GCN).	9
2.3. Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics (SAF/AQ).	10

2.4. The Headquarters, United States Air Force, Deputy Chief of Staff for Logistics, Engineering and Force Protection, Directorate of Civil Engineers (AF/A4C). 10

2.5. The Headquarters, United States Air Force, Deputy Chief of Staff for Logistics, Engineering, & Force Protection, Directorate of Logistics (AF/A4L). 11

2.6. The Headquarters, United States Air Force, Surgeon General (AF/SG). 11

2.7. The Headquarters, United States Air Force, Chief of Safety (AF/SE). 12

2.8. Headquarters, United States Air Force, The Judge Advocate General (AF/JA) through the Air Force Legal Operations Agency, Civil Law and Litigation Directorate, Environmental Law and Litigation Division (AFLOA/JACE). 12

2.9. The Chiefs of the National Guard Bureau (NGB) and Air Force Reserve Command (AFRC). 12

2.10. Major Command (MAJCOM) or Air National Guard Readiness Center (ANGRC) Commander and/or Environment, Safety, and Occupational Health Council (ESOHC) Chair. 13

2.11. Air Force Installation and Mission Support Center (AFIMSC). 13

2.12. The Air Force Civil Engineer Center, Environmental Directorate (AFCEC/CZ). . 13

2.13. AFCEC Operations, Energy, and Readiness Directorates (AFCEC/CO, CF, CN, and CX), to the AFIMSC, will provide criteria, standards, procedural guidance, and technical support for environmental compliance related activities to include air emission controls, the execution of RCRA Military Munitions Rule (40 CFR Part 266, Subpart M, Standards for The Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities: 17

2.14. Installation/Center Commander. 18

2.15. Base Civil Engineer (BCE) will (RegAF Installations): 20

2.16. The Civil Engineer-Installation Management Flight, Environmental Element (CEIE) or AFR Component (ANG or AFRC) Environmental Management Office (hereafter referred to as Installation Environmental Element), is the installation environmental function with overall management and execution responsibility for the installation’s environmental program and focal point for monitoring the installation’s compliance status with all applicable federal, state, local, and host-nation requirements. 21

2.17. Installation Staff Judge Advocates (JA), or NGB JA for ANG and MAJCOM/JA for AFRC, will: 24

2.18. The Air Force Institute of Technology (AFIT) Civil Engineer School will, in coordination with AFCEC/CZ, provide educational/training programs in support

of environmental compliance, pollution prevention and hazardous material management.	24
CHAPTER 3—HAZARDOUS MATERIAL MANAGEMENT	25
3.1. General Requirements - Hazardous Materials Management Process (HMMP).	25
3.2. Establishing and Running Installation Hazardous Material Management Process (HMMP) Teams.	26
3.3. Installation HAZMAT Management Guidance and Procedures.	27
CHAPTER 4—AIR QUALITY COMPLIANCE AND RESOURCE MANAGEMENT	38
4.1. General Requirements.	38
4.2. General Program Guidelines.	38
4.3. Air Quality Management System.	39
4.4. Air Quality Planning.	39
4.5. Air Quality Compliance - Implementation and Operation.	44
4.6. Air Quality Self-Assessment and Corrective Action.	47
4.7. Air Quality Management Review.	48
4.8. Air Quality Records Management.	48
CHAPTER 5—HAZARDOUS WASTE (HW) MANAGEMENT	50
5.1. General Requirements.	50
Table 5.1. Pollution Prevention Methodology.	51
5.2. Hazardous Waste Management Plan (HWMP).	51
5.3. Waste Characterization and Identification.	52
5.4. Disposal Contracts.	54
5.5. Host-Tenant Support.	55
5.6. Hazardous Waste (HW) Implementation and Operation.	56
5.7. HW Self-Assessment and Corrective Action.	59
CHAPTER 6—INTEGRATED SOLID WASTE MANAGEMENT	60
6.1. General Requirements.	60
6.2. Integrated Solid Waste Management (ISWM) Plan.	60
6.3. Recordkeeping and Reporting.	60

6.4.	Handling, Storage, and Collection.	61
6.5.	Municipal Solid Waste (MSW).	61
6.6.	SW Diversion.....	62
6.7.	Defense Working Capital Fund Activities.	65
6.8.	Construction and Demolition (C&D) Debris.....	65
6.9.	Asbestos-contaminated C&D Management.....	65
6.10.	Lead Based Paint (LBP)-Contaminated Construction & Demolition Debris Management.....	66
CHAPTER 7—TOXICS MANAGEMENT		67
7.1.	Toxic Substances Control Act (TSCA).	67
7.2.	Management of Individual Toxics.	67
7.3.	Emergency Planning and Community-Right-to-Know Act (EPCRA) Management.....	73
Attachment 1—GLOSSARY OF REFERENCES AND SUPPORTING INFORMATION		76
Attachment 2—WASTE MANAGEMENT COMPLIANCE STATUTES AND REGULATIONS		101
Attachment 3—AIR EMISSION REDUCTION CREDITS		103

Chapter 1

INTRODUCTION

1.1. Overview. This publication establishes directive guidance and procedures for AF-wide environmental compliance and pollution prevention management. AF organizations at all levels must follow this manual to ensure uninterrupted access to the air, land, and water assets needed to conduct the AF mission.

1.2. Scope. This AFMAN directs the Air Force Civil Engineer Center (AFCEC), the primary support unit under the Air Force Installation and Mission Support Center (AFIMSC), and installations to establish and maintain compliance and pollution prevention programs to comply with all applicable federal, state and local environmental laws and standards.

1.2.1. Follow state and local laws consistent with federal government waiver of sovereign immunity.

1.2.2. Follow more stringent environmental compliance requirements under applicable state and local standards.

1.2.3. AF installations located outside the U.S. must implement this AFMAN consistent with applicable international agreements, Unified Combatant Command (UCC) policy, environmental annexes to operational orders or plans, and country-specific final governing standards (FGS), or in their absence, the Overseas Environmental Baseline Guidance Document (OEBGD). **(T-1)**. In case of conflict, applicable international agreements, UCC policy, the environmental annex, the FGS, or the OEBGD takes precedence over this AFMAN.

1.3. Statutes and Regulations. See [Attachment 1](#) for a list of pertinent statutes and regulations and [Attachment 2](#) for a list of waste management statutes and regulations, including Public Law 102-386, *Federal Facility Compliance Act*. The compliance and pollution prevention programs included in this manual will consider media-specific impacts related to AF activities and ensure compliance with applicable environmental legal requirements. Therefore, in accordance with AFPD 32-70, and consistent with DoDI 4715.06, *Environmental Compliance in the United States*, DoDI 4715.05, *Environmental Compliance at Installations Outside the United States*, and DoDI 4715.23, *Integrated Solid Waste Management*, AFCEC and AF installations shall establish and maintain the environmental media area programs outlined below.

1.3.1. Air Quality. An Air Quality Compliance Program (Air Quality Program) that governs the operation of all AF stationary, mobile, and transitory sources of air pollution. **(T-0)**. This will provide data for basing and operational decisions; and assess, attain, and maintain compliance with applicable federal, state and local air quality standards associated with 42 USC §§ 7401-7671q, *Clean Air Act (CAA)*, for AF installations.

1.3.2. Hazardous Materials Management. A cross-functional program that governs the procurement, management and use of hazardous materials through a hazardous process authorization in order to: (1) support AF mission requirements; (2) protect the safety and health of personnel on AF installations and communities surrounding AF installations; (3) achieve pollution prevention objectives by minimizing AF dependence on hazardous materials, while reducing associated total ownership costs; and (4) maintain AF compliance with environmental pollution prevention and reporting requirements. **(T-1)**. In order to comply with Executive Order (E.O.) 13834, *Efficient Federal Operations*, AF installations located in the United States

will comply with hazardous material reporting requirements of 42 USC §§ 11001-11050, *Emergency Planning and Community Right-to-Know Act*, as implemented by the United States Environmental Protection Agency (EPA). **(T-0)**.

1.3.3. Water Quality. A Water Quality program to ensure water quality management takes into account impacts on water quality from AF activities and that such activities comply with all applicable permit standards under the National Pollutant Discharge Elimination System. This refers to point source and non-point source water discharge standards in accordance with The Federal Water Pollution Control Act, as amended by 33 USC §§ 1251–1386, *The Federal Water Pollution Control Act*,. **(T-0)**. Reference state or local requirements and follow the AFI 32-1067, *Water and Fuel Systems*, for water quality requirements impacting civil engineer wastewater and storm water utilities management.

1.3.4. Safe Drinking Water. A Drinking Water Surveillance Program on base that ensures AF-owned or operated water production and treatment facilities are managed in a manner compliant with 42 USC §§ 300f – 300j-26, *The Safe Drinking Water Act* and protects human health and safety from AF mission activities. **(T-0)**. Reference AFI 48-144, *Drinking Water Surveillance Program*, for Safe Drinking Water Act sampling/monitoring requirements, and AFI 32-1067 for operational requirements impacting AF drinking water systems.

1.3.5. Storage Tanks. A Storage Tank Program to prevent spills and ensure AF mission operations are conducted in compliance with federal and applicable state and local environmental regulations. **(T-0)**. Federal requirements are primarily under Title 40 Code of Federal Regulations (CFR) Part 112, *Oil Pollution Prevention*, and 40 CFR Part 280, *Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks*. Overseas locations will establish a Storage Tank Program in accordance with country-specific FGS, the OEBGD, if no FGS exists, or applicable provisions of an international agreement **(T-0)**. Fuel Infrastructure (e.g., storage tanks and associated piping, transfer terminals, hydrant systems and pipelines), operated and maintained in accordance with environmental regulatory requirements, perform an essential function in support of the AF mission. Where petroleum and hazardous substances are necessary for use by the AF mission, these may be stored in underground or aboveground storage tanks. Additional standards and directive guidance can be found in AFI 23-201, *Fuels Management*; AFI 23-204, *Organizational Fuel Tanks*; Unified Facilities Criteria (UFC) 3-460-01 *Design: Petroleum Fuel Facilities*; UFC 3-460-03 *O&M: Maintenance of Petroleum Systems*; National Fire Protection Association, Petroleum Equipment Institute; Steel Tank Institute; American Petroleum Institute; National Electric Code; and the Occupational Safety and Health Administration (OSHA).

1.3.6. Waste Management. The program to minimize or eliminate the volume and toxicity of solid waste (SW) and HW generated from AF operations in accordance with 42 USC §§ 6901-6992, *Solid Waste Disposal Act and the Resource Conservation and Recovery Act (RCRA)*. Implement the program's key element of risk reduction, and maximize efficiencies while supporting the mission, as follows:

1.3.6.1. Integrated Solid Waste Management (ISWM). Establish, implement, and maintain an (ISWM) Program to maximize the recovery or diversion of SW (including construction and demolition debris) from landfills in accordance with DoDI 4715.23. **(T-0)**. For overseas installations, the AF shall operate and maintain an ISWM in accordance with

DoDI 4715.23, country-specific FGS or the OEBGD, if no FGS exists, or applicable provisions of an international agreement. **(T-0)**.

1.3.6.2. Qualified Recycling. Installation ISWM programs that retain the proceeds from the sale of recyclable materials shall establish and maintain a single Qualified Recycling Program in accordance with 10 USC § 2577, *Disposal of Recyclable Materials*, 32 CFR Part 172, *Disposition of Proceeds From DoD Sales of Surplus Personal Property*, and DoDI 4715.23. **(T-0)**.

1.3.6.3. Hazardous Waste (HW). Establish and maintain a HW management program that ensures compliance with all applicable federal, state, and local laws and regulations (40 CFR Part 260-273, *Hazardous Waste Management System*), DoDI 4715.06, and other DoD/AF policies. **(T-0)**. Use a HW management plan to document installation processes/procedures. **(T-1)**. Overseas locations establish and maintain a HW management program in accordance with DoDI 4715.05, country-specific FGS, the OEBGD, if no FGS exists, or applicable provisions of an international agreement. **(T-0)**.

1.3.7. This AFMAN does not address radioactive waste (RW) (except mixed waste), medical waste, or radon. Radioactive waste is addressed in AFMAN 40-201, *Radioactive Materials (RAM) Management*. Medical waste is addressed in AFI 41-201, *Managing Clinical Engineering Programs*. Radon is addressed in AFI 48-148, Ionizing Radiation Protection. **Note:** Certain medical waste and expired and unused pharmaceuticals intended to be disposed can meet the definition of HW, and therefore its management is governed by the Resource Conservation and Recovery Act and this AFMAN.

1.3.8. See [Attachment 2](#) for an outline of federal regulations and laws related to Waste Management.

1.4. Environmental Management System (EMS). Consistent with E.O. 13834, and in accordance with DoDI 4715.17, *Environmental Management System*; AFPD 90-8, *Environment, Safety, & Occupational Health Management and Risk Management*; and AFPD 32-70, AF installations are directed to use an EMS framework to sustain, restore, and modernize natural and built infrastructure assets to support mission capability. **(T-0)**. Installation commanders or Installation Environment, Safety, and Occupational Health Councils will ensure the environmental media programs outlined above are operated within this EMS framework consistent with AFPD 32-70 and using the AF guidance contained in AFI 32-7001. **(T-1)**. AFI 32-7001 provides the EMS methodology, specifies use of standardized automated tools on AFCEC's SharePoint® site, eDASH (Virtual Environmental Management Office for the ANG bases), requires use of AFCEC environmental planning templates, and outlines environmental/natural infrastructure reporting requirements. The EMS framework thus allows AF and installations to appropriately plan, implement, operate, check, and monitor all facets of activities necessary in a cycle of continual improvement. This Plan-Do-Check-Act cycle can best be used to manage natural infrastructure assets and apply pollution prevention methodologies to achieve compliance while ensuring installation readiness and sustaining mission capability.

Chapter 2

ROLES AND RESPONSIBILITIES

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

2.1.1. Establishes overarching AF environmental policy directing establishment of regulatory media area programs to consider media-specific impacts related to AF activities. It also ensures installation environmental compliance, risk reduction, and continuous improvement in business processes which supports installation and mission resilience, efficiency, conservation, and innovation.

2.1.2. Provides coordination, integration and oversight of DoD environmental compliance strategy and emergent issues, to include assessment of execution of AF environmental programs described in this manual.

2.1.3. Develops the enterprise strategies, priorities, goals, and metrics in coordination with the Deputy Chief of Staff for Logistics, Engineering and Force Protection, Directorate of Civil Engineers (AF/A4C), to track and analyze Major Command (MAJCOM) and installation investment and execution of environmental compliance and the prevention of pollution.

2.1.4. Serves as the principal AF representative on all environmental management issues for formal interactions with staff from the Office of the Secretary of Defense, federal agencies, and Congress, to include CAA National Security Exemptions (NSE) claimed by the AF and being informed of interactions and agreements made with external environmental organizations.

2.1.5. Approves each AF CAA General Conformity Determination prior to release for public review and prior to finalization.

2.1.6. Reviews all requests for the payment of state punitive fines and penalties assessed under the waiver of federal sovereign immunity under the CAA (See [Paragraph 4.8.4](#)).

2.1.7. Provides oversight of the Headquarters Air Force (HAF) Hazardous Material Management Process (HMMP) team consisting of representatives from the Weapon Systems acquisition and the Environmental, Safety, and Occupational Health communities that report to the HAF Environment, Safety, and Occupational Health Steering Committee (ESOH SC).

2.2. The General Counsel of the Department of the Air Force (SAF/GC), through the Deputy General Counsel for Installations, Energy and Environment (SAF/GCN). SAF/GCN:

2.2.1. Provides legal advice to the Secretary of the AF concerning all matters associated with environmental laws and other applicable legal requirements.

2.2.2. Serves as the principal legal adviser to SAF/IEE on environmental compliance policy, including resolution of final enforcement action decisions, settlement of punitive fines and penalties, and determinations of invocation or waiver of Federal sovereign immunity. Depending on the legal issues and governing documents relating to the issues, SAF/GC consults with the Air Force Legal Operations Agency (AFLOA) or other legal service providers.

2.2.3. Reviews and advises SAF/IEE on the legal sufficiency of all draft and final CAA General Conformity Determinations after consultation with AFLOA/JACE on potential litigation risks.

2.2.4. Nothing in this Paragraph is inconsistent with HAF Mission Directive (HAFMD) 1-14, *General Counsel and The Judge Advocate General*.

2.3. Assistant Secretary of the Air Force for Acquisition, Technology, and Logistics (SAF/AQ). SAF/AQ:

2.3.1. Incorporates environmental risk management into systems engineering and the acquisition decision-making process, consistent with HAF Mission Directive 1-18, *Assistant Secretary of the Air Force (Installations, Environment and Energy)*, AAFP 32-70, and AFI 32-7001.

2.3.2. Provides HAF-level management, with the Directorate of Logistics (AF/A4L), of the AF account at the DoD Ozone Depleting Substances (ODS) Reserve.

2.3.3. Consults on Environmental contracting issues, sustainable procurement, and use of Federal Acquisition contract clauses.

2.4. The Headquarters, United States Air Force, Deputy Chief of Staff for Logistics, Engineering and Force Protection, Directorate of Civil Engineers (AF/A4C). AF/A4C:

2.4.1. Assists SAF/IEE on matters related to policy, strategy, direction and oversight, including governance, to execute the environmental programs described in this manual.

2.4.2. Develops strategy and implementing policy guidance for the management and programming investments for the environmental media areas described in this manual. Consults with the AFCEC, ANGRG, AFRC, and HAF Environmental, Safety and Occupational Health (ESOH) and Logistics functions on environmental strategy, guidance, and performance monitoring.

2.4.3. Participates as the AF lead in DoD Environmental media-specific steering committees on behalf of SAF/IEE, except primary representative for Safe Drinking Water Act committee is assigned from the Air Force Medical Readiness Agency (AFMRA), Healthcare Operations Directorate (SG3). Represents AF position/interests involving DoD feedback on federal and state legislation/regulations, executive order implementation, and DoD policies which effect installation environmental management and resiliency.

2.4.4. Provides oversight of training and performance monitoring for installation environmental compliance and pollution prevention programs, to include consultation and oversight of Air Force Institute of Technology (AFIT) Environmental Courses.

2.4.5. Incorporates environmental compliance requirements into civil engineer processes through guidance, procedures, and training.

2.4.6. Partners with the Air Force Surgeon General (AF/SG) to ensure Safety Data Sheet (SDS) data management meets both Hazard Communication Standard and hazardous material tracking system requirements.

2.4.7. Integrates ODS management and conservation into installation and facility management policies, procedures, and training.

2.4.8. Provides core membership and administrative lead for CE Governance, to include the Environmental Program Working Group; provides environmental program manager oversight of environmental panels established under the Environmental Program Working Group.

2.4.9. Leads the HAF HMMP team consisting of representatives appointed by SAF/AQ, Air Force Chief of Safety (AF/SE), AF/SG, and the AF, Deputy Chief of Staff for Logistics, Engineering, & Force Protection, Directorate of Logistics (AF/A4L); and reports to the HAF ESOH SC to identify and resolve hazardous material management issues, particularly in implementing policy and ensure visibility by cross-feeding best practices from the field.

2.5. The Headquarters, United States Air Force, Deputy Chief of Staff for Logistics, Engineering, & Force Protection, Directorate of Logistics (AF/A4L). AF/A4L:

2.5.1. Provides policy and guidance necessary to align responsibilities and procedures in this document with Logistics and Maintenance directive guidance.

2.5.2. Establishes sustainable hazardous material transportation and air quality compliance guidance associated with Air Force Fleet Vehicle management, with centralized execution through the 441st Vehicle Support Chain Operations Squadron at Joint Base Langley-Eustis, VA.

2.5.3. Establishes hazardous material (HAZMAT) procurement data requirements and procedures to collect data for reporting requirements.

2.5.4. Integrates environmental risk management and hazardous material/HW procedures into weapon system maintenance and logistics readiness processes, investment and decision-making.

2.5.5. Incorporates HMMP requirements into material management and maintenance processes through policies, procedures, and training.

2.5.6. Advocates for the resources (funding and personnel) required so installation supply and maintenance functions can execute their HMMP responsibilities.

2.5.7. Incorporates appropriate hazardous material substitution processes into weapon system deficiency reporting and Technical Order change policy and guidance.

2.5.8. Works with SAF/AQ to manage the AF account at the DoD or Defense ODS Reserve operated by the Defense Logistics Agency (DLA) and to ensure HAF-level management of out-of-production ODS reflects A4 sustainment priorities.

2.5.9. Ensures A4 personnel receive education and training on requirements related to the storage, handling and transportation of hazardous material and HW as well as operating air emission sources.

2.5.10. Provides logistics readiness and maintenance participation in the HAF HMMP team.

2.6. The Headquarters, United States Air Force, Surgeon General (AF/SG). AF/SG:

2.6.1. Incorporates environmental compliance and pollution prevention requirements into SG processes through policies, procedures, and training.

2.6.2. Serves as the AF office of primary responsibility (OPR) for SDS issues and data management needs with respect to the OSHA Hazard Communication Standard.

2.6.3. Partners with AF/A4C and AFCEC to ensure adequate sampling, analysis and monitoring programs are implemented to meet compliance requirements for regulations impacting the environmental media areas described in this manual.

2.6.4. Provides AF/SG participation in the HAF HMMP team.

2.6.5. Serves as the AF focal point for Safe Drinking Water Act issues.

2.7. The Headquarters, United States Air Force, Chief of Safety (AF/SE). AF/SE:

2.7.1. Incorporates environmental compliance and pollution prevention requirements into AF/SE processes through policies, procedures, and training.

2.7.2. Provides AF/SE participation in the HAF HMMP team.

2.8. Headquarters, United States Air Force, The Judge Advocate General (AF/JA) through the Air Force Legal Operations Agency, Civil Law and Litigation Directorate, Environmental Law and Litigation Division (AFLOA/JACE). AFLOA/JACE:

2.8.1. Provides legal expertise to HAF, MAJCOMs, reserve components, AFIMSC, AFCEC and installations on all applicable laws, regulations, and E.O. requirements impacting AF hazardous material and environmental policy implementation.

2.8.2. Provides legal expertise on applicability of this manual to locations outside the U.S. to ensure there is no conflict with applicable country-specific FGS or, in countries where no FGS exist, the Overseas Environmental Baseline Guidance Document (OEBGD), and UCC directives.

2.8.3. Ensures coordination with Department of Justice, SAF/IEE, and SAF/GCN regarding the payment of CAA or other applicable penalties. Provides approval before settlement of any administrative action where the terms of the settlement include provision for the payment of fines or supplemental environmental projects. The appropriate Regional Counsel Office (East or West), established under AFLOA/JACE, will assist in resolving enforcement actions processed against AF installations.

2.8.4. Assists in the review and validation of all proposed air quality NSEs and coordinates with SAF/GCN, SAF/IEE and AF/A4C as warranted.

2.8.5. Nothing in this Paragraph is inconsistent with HAF Mission Directive (HAFMD) 1-14, *General Counsel and The Judge Advocate General*.

2.9. The Chiefs of the National Guard Bureau (NGB) and Air Force Reserve Command (AFRC). NGB and AFRC will:

2.9.1. Develop additional guidance or instructions as applicable, to meet unique operational and mission needs, and ensure adequate oversight of the environmental media areas in this manual.

2.9.2. Perform the roles and responsibilities performed by the Air Force Civil Engineer Center, Environmental Directorate (AFCEC/CZ) for AFR installations, except for appropriate subject matter expert (SME) roles/responsibilities.

2.9.3. Participate as a member of each AFCEC environmental media panel.

2.9.4. The Air National Guard, Logistics and Installation Directorate, Asset Management Division, Environmental Branch (NGB/A4AN) provides program guidance and manages ANG's organizational/multi-site environmental management system to ensure compliance, reduce risk, and continual improvement.

2.10. Major Command (MAJCOM) or Air National Guard Readiness Center (ANGRC) Commander and/or Environment, Safety, and Occupational Health Council (ESOHC) Chair. ESOHC chairs will:

2.10.1. Monitor environmental performance and provide oversight and direction to installation commanders through the installation ESOHCs to maintain compliance or implement corrective actions on a timely basis to minimize environmental deficiencies.

2.10.2. Implement a culture of compliance and excellence to enable Airmen to carry out activities across all AF mission areas that might impact the environment.

2.10.3. All references to Commands in this AFMAN include the ANGRC and other agencies that HAF designates as "Major Command equivalent". As needed, Commands will provide administrative, technical, and resource advocacy support to ensure installations comply with AF policies and regulatory requirements.

2.11. Air Force Installation and Mission Support Center (AFIMSC). AFIMSC:

2.11.1. Provides resource advocacy, and plan, program, and budget for AF environmental Operations and Maintenance (O&M) programs.

2.11.2. Assists AF installations in delivering the capabilities to implement facility environmental strategic policy, guidance, and environmental reporting.

2.12. The Air Force Civil Engineer Center, Environmental Directorate (AFCEC/CZ). AFCEC/CZ, a Primary Subordinate Unit to the AFIMSC, provides execution support to RegAF installations in order to implement this AFMAN, consisting of subject matter expertise, issuing supplemental guidance, allocating resources, and overseeing execution of the environmental management process throughout the AF. The AFCEC, Environmental Directorate (AFCEC/CZ), will:

2.12.1. Provide SMEs to serve as AF-wide authoritative experts for each major Environmental Compliance Program, establishing and updating procedures, tracking and analyzing overall environmental compliance, and developing enterprise-level compliance strategies and continuous improvement initiatives. **(T-1)**. Specific responsibilities will include, but not be limited to:

2.12.1.1. Serving as the program management office for the standard AF Air Quality Tracking System, Air Program Information Management System (APIMS) and support to the program management office and functional management office for the Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS). **(T-2)**. Coordinate with NGB/A4AN and Air Force Reserve Command, Environmental & Asset Accountability Branch (AFRC/A4A) for the development and update of environmental databases within AFCEC purview which would impact AFR components.

2.12.1.2. Ensuring technical support for environmental compliance related requirements, including capability to interface with or carry out activities at the RegAF installations in

the U.S. and territories, or directly interface with ANGRG, AFRC, and overseas installations. **(T-2)**. (**Note:** United States Air Forces Europe and Pacific AF installations are supported by AFCEC/CF Europe and Pacific divisions.)

2.12.1.3. Assisting in the collection, quality assurance, and analysis of environmental compliance data, consistent with AFI 32-7001, as follows:

2.12.1.3.1. Develop and maintain program-wide key performance indicators and performance metrics, data requirements, and schedules in order to perform trend analysis and conduct compliance assessments. **(T-2)**.

2.12.1.3.2. Collect, consolidate, and maintain installation-level environmental compliance performance data, to include enterprise-level (AF-wide) performance data needed for the Defense Environmental Programs Annual Report to Congress (DEPARC) and Office of the Secretary of Defense and for AF environmental management reviews. **(T-0)**.

2.12.1.3.3. Track, assess, and communicate new or emerging regulatory requirements for their potential impact on installation operations. **(T-2)**.

2.12.1.4. Developing enterprise level (AF-wide) environmental compliance and resource management education and training. **(T-2)**. Where feasible, pursue cost-effective non-traditional education and training methodologies (e.g., correspondence and webinar training).

2.12.1.5. Reviewing, validating, and approving proposed NSE and NSE endorsements. **(T-1)**. Only the SME will provide final approval of “automatically exempt” (without request) or proposed NSE endorsements under 40 CFR Part 1068, *General Compliance Provisions for Engine Programs*. **(T-1)**. Process NSE requests requiring EPA approval or that are precedence setting or have potential for high visibility in accordance with the latest DoD and AF policies and guidance. Ensure the originating organization or AFCEC/CZ coordinates with the Civil Engineer-Installation Management, Environmental Element, AFLOA/JACE, and higher headquarters (AF/A4C, SAF/IEE, and SAF/GCN). **(T-1)**.

2.12.1.6. Ensuring current installation Air Emission Inventories (AEI) and Potential-to-Emit (PTE) emissions inventories are performed and maintained in accordance with this manual AEI guidance, and 40 CFR **Part 51**, Subpart A, *Air Emissions Reporting Requirements*. **(T-0)**. Additionally, ensure AEIs and PTE contributions are explicitly documented in APIMS and emission budget updates are provided to state authorities as part of the recurring SIP revision process applicable to the installation. **(T-1)**.

2.12.1.7. Providing AF-wide Air Quality Program non-directive guidance, standardized best compliance practices or methodologies, in the form of civil engineer Playbook content, or other means, for critical (i.e., high regulatory risk) air quality areas. **(T-1)**. Includes:

2.12.1.7.1. AEI guidance for AF sources relaying standardized procedures and methodologies for estimating emissions for AEI (per 40 CFR **Part 51**, Subpart A); to include mobile, stationary, transitory, PTE, and all other sources of air emissions.

2.12.1.7.2. Air Quality guidance for implementation of 32 CFR **Part 989**, *Environmental Impact Analysis Process (EIAP)*, and General Conformity guidance in accordance with 40 CFR **Part 51**, Subpart W, *Determining Conformity of General*

Federal Actions to State or Federal Implementation Plans and 40 CFR **Part 93**, Subpart B, *Determining Conformity of General Federal Actions to State or Federal Implementation Plans*.

2.12.1.7.3. An attainment status list of AF installations and facilities, through on-going review of U.S. CFRs, for use in permitting, EIAP, and Conformity Rules assessment.

2.12.1.7.4. Greenhouse Gas guidance on standardized procedures and methodologies for estimating emissions, to include mandatory reporting in accordance with 40 CFR **Part 98**, *Mandatory Greenhouse Gas Reporting* and DoD compliance with greenhouse gas requirements under E.O. 13834.

2.12.1.7.5. Emerging issues analysis and guidance on new and emerging regulatory requirements to assess impacts on the mission and ensure compliance, in the form of an annual emerging issues assessment report. For emerging regulatory requirements, identify and establish appropriate guidance prior to the promulgation of the regulation.

2.12.1.8. Developing enterprise-level non-directive air quality compliance guidance for key source categories within civil engineering. **(T-2)**. Includes the following:

2.12.1.8.1. Internal Combustion Engine sources in accordance with 40 CFR **Part 63**, *National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories*, in particular Reciprocating Internal Combustion Engines; and 40 CFR **Part 60**, *Standards of Performance for New Stationary Sources*, especially related to Stationary Spark and Stationary Compression Ignition, Internal Combustion Engines..

2.12.1.8.2. Boilers and process heaters in accordance with 40 CFR **Part 63**, *NESHAP*, for major Source Categories such as Industrial, Commercial, and Institutional Boilers and Process Heaters, and Industrial, Commercial, and Institutional Boilers Area Sources.

2.12.1.8.3. Refrigerant management to expand on requirements in 40 CFR **Part 82**, *Protection of Stratospheric Ozone*.

2.12.1.8.4. Other key source categories as determined by the AFCEC SME.

2.12.2. Cross-feed best practices and standardized Environmental Compliance programs across the AF. **(T-2)**.

2.12.3. Plan, program, and budget environmental compliance requirements for applicable programs described in this manual in accordance with AFI 32-7001. **(T-1)**.

2.12.4. Validate enforcement actions, host nation enforcement actions, or notices of violations, and tracks until closure, in accordance with AFI 32-7001. **(T-1)**. As stated in AFI 32-7001, SMEs review management action plans to ensure outstanding open enforcement actions are resolved within the required time frames; review the response to regulatory agency inspection findings to ensure process owners take timely corrective actions and implement appropriate preventive measures; and ensure reporting timelines outlined in AFI 32-7001 are followed.

2.12.5. Ensure installations use the Environmental Management System (EMS) framework in accordance with AFI 32-7001, to build a management strategy for each environmental compliance media area addressed in this manual to support mission capability by ensuring the

sustainment, restoration, and modernization of natural and built infrastructure assets. **(T-1)**. This includes using eDASH/VEMO as the primary repository for the storage of environmental documentation and/or ensuring other systems include links to eDASH as the authoritative source.

2.12.6. When requested, can represent the AF on a regional basis, to federal, state, and local environmental regulatory agencies. This includes being the lead liaison office on behalf of installations for interfacing with regulatory agencies and other internal/external audit personnel, on matters requiring environmental compliance expertise or involving resource management issues.

2.12.7. Review all permits, permitting requirements, and associated federal, state, local Resource Conservation and Recovery Act (RCRA) regulations (40 CFR Parts 239-282) or CAA regulations (40 CFR **Parts 50-98**, *Air Programs*), for waste management and air quality compliance respectively, or equivalent host nation requirements (overseas), to ensure compliance conditions are met for both current mission operations and projected mission growth. **(T-1)**. This includes maintaining an updated summary of all permit requirements for installations, with a comparison to the regulatory requirements and schedules; and in coordination with the installation, ensuring that all required permits are applied for, maintained, updated, and signed by an appropriate official.

2.12.8. Consult with Environmental Planners and base civil engineering on air quality and waste management impacts as early as practicable to ensure timely EIAP assessments under the National Environmental Policy Act (40 CFR Parts 1500-1508, *Council on Environmental Quality*) process for Military Construction (MILCON) and non-MILCON projects. **(T-2)**. This includes preparing and submitting all necessary environmental permits and related fees within project funding constraints. **(T-2)**.

2.12.9. Review all AF General Conformity Determinations before submission to SAF/IEE and SAF/GCN for approval to ensure installations in CAA nonattainment or maintenance areas comply with the Conformity Rules in accordance with this AFMAN, 40 CFR **Part 51**, Subpart W; 40 CFR **Part 93**, Subpart B. Additional non-directive guidance on AF application of the CAA Conformity Rule is available from AFCEC/CZ. **(T-0)**.

2.12.10. Maintain an authoritative CAA attainment status list under the NAAQS of AF installations and facilities, through on-going review of the U.S. CFRs, for use in permitting, EIAP, and Conformity Rules assessment. **(T-2)**.

2.12.11. Develop refrigerant management non-directive guidance to meet requirements under the CAA (40 CFR **Part 82**). **(T-1)**.

2.12.12. Ensure coordination through the appropriate chain-of-command of any comments on federal, state, and local proposed rulemaking, revisions, plans, protocols, and permits. **(T-1)**. Consult with higher headquarters on negotiations with federal, state, and local regulatory agencies regarding installation-specific issues (e.g., variances, permit limits, and operating conditions). **(T-1)**.

2.12.13. Track, assess, and report new or emerging regulatory requirements for potential impact on installation operations. Ensures any such requirements are incorporated into appropriate program elements and reports identified impacts through the chain of command. **(T-2)**.

2.12.14. Use AFI 90-201, *Air Force Inspection System*, and the Management Internal Control Tool (MICT) as a tool for assessing and monitoring AF compliance, and identifying and prioritizing recommended corrective actions as necessary. **(T-1)**.

2.12.15. Provide regulatory and legislative support by serving as a technical and regulatory advisor to the SAF/IEE, AF/A4C, AFRC, and ANG. **(T-1)**. Monitors environmental compliance regulatory initiatives developed by the EPA and state agencies. **(T-1)**.

2.12.16. Provide guidance and technical expertise for the AF Hazardous Materials Management Process (HMMP) as follows:

2.12.16.1. Provide guidance to installations to ensure that outsourcing and privatization initiatives involving any of the HMMP team responsibilities explicitly spell-out those responsibilities in the contract. **(T-2)**.

2.12.16.2. Develop and maintain an AF HMMP web page and HMMP guidance on AFCEC's SharePoint® site, eDASH, to enhance information exchange. **(T-1)**.

2.12.17. Plan, program, and advocate for civil engineer-related HMMP responsibilities consistent with environmental budgeting guidance in AFI 32-7001. **(T-1)**.

2.12.18. Establish a Hazardous Material Data Steward for EESOH-MIS to centrally create and manage Safety Data Sheets and associated product hazard data for EESOH-MIS and to be in a position to transfer SDS information to the AF SDS Focal Point in accordance with AFI 90-821, *Hazard Communication (HAZCOM) Program*. **(T-1)**. Posture the AF to adequately convey hazardous material information to Defense Logistics Agency's (DLA) Hazardous Material Data Management System consistent with DoDI 6050.05, *DoD Hazard Communication (HAZCOM) Program*.

2.12.19. Serve as the single, AF-wide authoritative expert for installation SW qualified recycling programs, solid and HW compliance, and waste minimization. **(T-2)**. This includes establishing and updating waste management procedures, performing program analysis for process improvement, reporting and establishing environmental compliance and pollution prevention metrics, and establishing requirements for investment in pollution prevention.

2.12.20. Serve as a focal point for environmental regulatory expertise and information related to toxic areas, including Polychlorinated Biphenyls (PCB), Emergency Planning and Community Right-to-Know Act (EPCRA), and Toxic Substances Control Act (asbestos, lead-based paint, etc.). **(T-2)**.

2.12.21. Support the installation by arranging and completing Operational Range Assessments in accordance with DoDI 4715.14, *Operational Range Assessments*. **(T-0)**.

2.12.22. Partner with AFMSA/SG3 where appropriate to ensure adequate sampling, analysis and monitoring programs are implemented to meet compliance requirements for regulations impacting the environmental media areas described in this manual. **(T-1)**.

2.13. AFCEC Operations, Energy, and Readiness Directorates (AFCEC/CO, CF, CN, and CX), to the AFIMSC, will provide criteria, standards, procedural guidance, and technical support for environmental compliance related activities to include air emission controls, the execution of RCRA Military Munitions Rule (40 CFR Part 266, Subpart M, Standards for The Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities: *Military Munitions*); waste management, and for environmental sources

planning, design, construction, operations, maintenance, and contract management services to the Air Staff, AFCEC, MAJCOMs, DRUs, and installations as requested. **(T-1)**.

2.14. Installation/Center Commander. Installation/Center commander will:

2.14.1. Establish and maintain the environmental programs listed in **Paragraph 1.3**, in accordance with DoDI 4715.06, Enclosure 2, **Paragraph 5b**. **(T-0)**. Ensure environmental compliance discipline and responsible resource management principles are emphasized to Airmen and incorporated in installation activities. **(T-3)**.

2.14.2. Ensure the installation environmental compliance program is managed to comply with all applicable U.S. federal, state, and local requirements (including permits) associated with waste management under 42 USC §§ 6901-6992, RCRA and air quality compliance under 42 USC §§ 7401-7671q, CAA. **(T-0)**. For overseas installations comply with the applicable host-nation FGS, or OEBGD, where no FGS exists. **(T-0)**. Finally, applicable MAJCOM Supplement, non-directive AFCEC playbooks or higher level DoDIs (e.g., DoDI 4715.06) can also apply. ANG and AFRC installation Commanders will ensure there is an identified environmental management POC dedicated to environmental compliance and management. **(T-2)**.

2.14.3. Ensure enforcement actions or host nation enforcement actions are promptly reported, tracked, and managed in accordance with AFI 32-7001. **(T-1)**.

2.14.4. Ensure installation organizations that award contracts with potential for using or delivering hazardous materials or generating emissions or waste consult with the civil engineering-Installation Management Flight, Environmental Element, or ANG Environmental Management Office (see **Paragraph 2.16**.) to include environmental compliance requirements and procedures in contract documents. **(T-1)**.

2.14.5. For the Hazardous Materials Management Process (HMMP):

2.14.5.1. Establish a cross-functional HMMP team via formal charter under the installation Environment, Safety, and Occupational Health Council (ESOHC) chair. **(T-1)**. Ensure core cross-functional members are appointed to the team as defined in **Chapter 3, Paragraph 3.2**.

2.14.5.2. Require organizations on an installation ensure that the procurement of hazardous materials follow Hazardous Material (HAZMAT) Tracking Activity (HTA) guidelines and is authorized and tracked using the Enterprise, Environment, Safety, and Occupational Health - Management Information System (EESOH-MIS) standard tracking system. **(T-1)**.

2.14.5.3. Ensure Unit Commanders properly dispose of excess hazardous materials, including ensuring all excess Class I ozone depleting substances (ODS) and Hydrochlorofluorocarbon-22 (HCFC-22, also called R-22) are returned to the ODS Defense Reserve stockpile maintained by the DLA in accordance with DoDI 4715.06. **(T-0)**. Class I ODS includes Halon chemical compounds in liquefied, compressed gas form used for fire-fighting operations.

2.14.6. For Air Quality Compliance and Resource Management:

2.14.6.1. In order to assure uninterrupted mission accomplishment at an installation, it is important that installations establish and maintain an Air Quality Program governing the

operation of all stationary and mobile sources of air pollution in order to assess, attain, and maintain compliance with all applicable federal, state, and local air quality regulations and permits.

2.14.6.2. Certify compliance with CAA Title V operating permit requirements, as the “Responsible Official” under the CAA, 40 CFR **Part 70**, *State Operating Permit Programs*, 40 CFR **Part 71**, *Federal Operating Permit Programs*, and applicable state or local regulations. **(T-0)**. This is accomplished by signing all CAA Title V permit applications, certifying compliance with any other applicable operating and construction permit requirements, and maintaining the authority to shut down any non-compliant air emissions source on the installation. “Responsible Official” duties are not authorized to be delegated to any subordinate official.

2.14.6.3. Ensure all installation organizations and tenant organizations (within the installation’s command and control) that own air emission sources comply with applicable federal, state, local, and installation air quality requirements under the CAA, and coordinate any actions which affect air quality with base civil engineering or AF Reserve Environmental Management Office. **(T-0)**.

2.14.6.4. Ensure any organizations planning to purchase equipment that generates air emissions with potential permitting, authorization, or registration requirements (e.g., degreasers, generators, boilers, painting, or abrasive blasting equipment), first coordinate with the Base Civil Engineer (BCE). **(T-1)**.

2.14.6.5. Ensure implementation of an installation Vehicle Inspection and Maintenance Program in accordance with the CAA §118(d) for employee-owned vehicles driven on the installation and CAA § 118(c) for government owned or leased vehicles. **(T-0)**. See **Paragraph 4.7.3.1.2** for applicability.

2.14.7. For Hazardous Waste (HW) Management:

2.14.7.1. Ensure the installation, as a potential generator of HW, establishes a HW program in accordance with AFD 32-70, to ensure compliance with **Chapter 5** of this AFMAN, and all applicable federal, state, and local laws and regulations established under 42 USC §§ 6901-6992, *RCRA*. **(T-0)**.

2.14.7.2. Ensure compliance with RCRA permit requirements/conditions (40 CFR Part 270, *EPA Administered Permit Programs: The Hazardous Waste Permit Program*), if the installation owns a permit(s) for HW treatment, storage, and disposal facilities (TSDF). **(T-0)**. In the event of a conflict, permit requirements supersede the guidance in this AFMAN. Installations minimize dependence on RCRA permits through waste minimization efforts or use of alternate closed-loop treatment, if feasible.

2.14.7.3. Sign HW manifests for HW shipped off-site as required by 40 CFR Part 262, Subpart B, *Standards Applicable to Generators of Hazardous Waste: Manifest Requirements Applicable to Small and Large Quantity Generators*. **(T-0)**. This responsibility can be delegated as long as the installation commander ensures the signature delegation remains with a qualified (trained) DoD employees (civilian, military, guard, reserve, or foreign national), or appropriately assigned State employee in the case of ANG installations. **Exception:** For installations where the entire environmental function is

outsourced on a Base Operations Support contract, the installation commander may designate a contract employee with appropriate training to sign HW manifests.

2.14.7.4. Ensure the installation accomplishes appropriate management and disposal of military munitions or material potentially presenting an explosive hazard in accordance with DoD Explosive Safety Board standards contained in Department of Defense Manual (DoDM) 6055.09-M, *DoD Ammunition and Explosives Safety Standards*, DoDI 4140.62, *Material Potentially Presenting an Explosive Hazard*, and compliance requirements of 40 CFR **Part 266**, Subpart M, *Military Munitions*; see also 40 CFR Parts 260-266, *Hazardous Waste Management System* and 40 CFR Part 270. **(T-0)**. Coordinate with AFCEC/CX for policy and guidance interpretation and execution of the Military Munitions Rule as it applies to Explosive Ordnance Disposal Operations and with AFCEC/CZ for policy and guidance interpretation and execution of the Military Munitions Rule as it applies to Waste Management activities, including handling of expended munitions scrap metal.

2.14.8. For SW Management:

2.14.8.1. Implement an Installation Solid Waste Management (ISWM) plan, which may include a Qualified Recycling Program (QRP), in accordance with DoDI 4715.23 and applicable federal, state and local regulatory requirements. **(T-0)**. For overseas bases, meet the applicable country-specific Final Governing Standard or OEBGD. **(T-0)**.

2.14.8.2. Ensure the installation, or any designated contractor, obtains and complies with all required permits for SW management, to include establishing or operating landfills, using material recovery facilities, or for the handling, storage, and collection involving composting, in order to ensure compliance with 40 CFR Part 258, *Criteria for Municipal Solid Waste Landfills* and equivalent State/local implementing regulations. **(T-0)**. This includes performing any required maintenance and monitoring activities specified in the permit.

2.14.8.3. Designate, in writing, a QRP manager and an alternate QRP manager, to oversee the base QRP operation, if the base establishes a QRP in accordance with DoDI 4715.23. **(T-0)**.

2.14.8.4. Establish a QRP committee and a chair to ensure a process that allows review of committee recommendations to include allocation of sales revenue received in accordance with 32 CFR Part 172. **(T-0)**.

2.15. Base Civil Engineer (BCE) will (RegAF Installations):

2.15.1. Ensure new construction or modifications to existing facilities, especially existing air emission sources, are not initiated until appropriate EIAP assessments are completed and permits are received from cognizant regulatory authorities in accordance with 40 CFR **Part 70**. **(T-0)**.

2.15.2. Ensure air-conditioning and refrigeration equipment are constructed, installed, operated, tested, repaired, and maintained in compliance with the CAA, specifically 40 CFR **Part 82**, other applicable state/federal requirements; or for overseas installations in accordance with country-specific FGS or, in their absence, the OEBGD. **(T-0)**.

2.15.3. Additional non-directive operational guidance on refrigeration management to help meet air quality compliance requirements is available from AFCEC.

2.15.4. Ensure Refrigerant Managers use the refrigerant module within Air Program Information Management System (APIMS) for all Refrigerant Management planning, tracking, monitoring, and recordkeeping actions required for ensuring Air Quality Program compliance. **(T-1)**.

2.15.5. Act, in concert with AFCEC/CZ and installation Judge Advocate (JA), as the liaison office for environmental compliance issues with regulatory agencies, in accordance with other applicable policy. **(T-3)**.

2.15.6. Ensure adequate recordkeeping processes on base in order to retain all environmental related notices, certifications, HW manifests, Recycling or Waste disposal shipping documents, audit results (on and off-base) and waste analyses, in accordance with environmental regulatory recordkeeping requirements under 40 CFR Part 262, Subpart D: *Recordkeeping and Reporting Applicable to Small and Large Quantity Generators*, AFMAN 33-363 and the AF Records Disposition Schedule. **(T-0)**. This includes the HW manager consulting with the base Records Custodian on appropriate records to track, and on the tracking duration, for waste or potential waste that leaves the base for disposal or recycling.

2.15.7. Sign an agreement with DLA on HW contract services in accordance with DoD Manual (DoDM) 4160.21, *Defense Material Disposition*, to include prescribed DLA format. **(T-0)**.

2.15.8. Ensure appropriate participation in any base QRP to include CE Operations and Environmental. **(T-1)**.

2.15.9. Ensure sufficient resources and support for integrated SW management activities, in accordance with AFI 32-1001, *Civil Engineer Operations*, to include adding information requirements in Performance Work Statements for obtaining waste information from contractors as needed. **(T-1)**.

2.15.10. Installation unit commanders owning waste generation or air pollution sources will endeavor to reduce pollution at the source in accordance with principles of 42 USC §§ 13101-13109, *Pollution Prevention Act*. **(T-1)**.

2.16. The Civil Engineer-Installation Management Flight, Environmental Element (CEIE) or AFR Component (ANG or AFRC) Environmental Management Office (hereafter referred to as Installation Environmental Element), is the installation environmental function with overall management and execution responsibility for the installation's environmental program and focal point for monitoring the installation's compliance status with all applicable federal, state, local, and host-nation requirements. The Installation Environmental Element (under the oversight of AFCEC/CZ, excluding AFRC and ANG installations), or AFR Component Environmental Element will:

2.16.1. Assist the installation commander to ensure compliance with all applicable U.S. federal, state, and local requirements (including permits), or for overseas, the FGS, or OEBGD, where no FGS exists. **(T1)**. In coordination with AFCEC/CZ (or ANGRC or AFRC), act as the liaison office for environmental compliance and resource management issues with regulatory agencies, and with both internal and external audit personnel. **(T-1)**. Conform to applicable AF/DoD policies and instructions, MAJCOM Supplements, and Playbooks/Standard Operating Procedures for best management practices.

- 2.16.2. Identify and arrange for environmental sampling, analysis, and monitoring to support environmental compliance on the installation, including as required for CAA driven Compliance Monitoring under 40 CFR **Part 58**, *Ambient Air Quality Surveillance* and RCRA compliance for generator waste determination under 40 CFR Part 261, *Identification and Listing of Hazardous Waste*. **(T-0)**. Ensure Quality Assurance in carrying out environmental sampling and testing programs in accordance with DoDI 4715.15, *Environmental Quality Systems*. **(T-0)**. See AFI 32-7001.
- 2.16.3. Initiate, develop, submit, or participate in funding requests for environmental compliance and resource management requirements, regardless of fund source. **(T-1)**.
- 2.16.4. Establish local procedures and provide technical expertise with regard to environmental compliance and resource management requirements. **(T-2)**.
- 2.16.5. Complete installation Emergency Planning and Community Right-to-Know Act reporting, notifications, and planning, along with other environmental reporting, as appropriate, in accordance with DoDI 4715.06. **(T-0)**. This includes overseeing proper programming, recordkeeping, and reporting procedures, to enable timely regulatory notifications of emissions, spills, and other environmental releases and events, and ensuring adequate responses to the Office of the Secretary of Defense and AF data calls.
- 2.16.6. Provide education and training, to include shop level training, to meet applicable federal, state, and local environmental compliance requirements. **(T-3)**.
- 2.16.7. Assist the installation commander by reviewing all permits and permitting requirements, and potentially applicable federal, state, and local requirements as necessary to ensure compliance conditions are met for air quality compliance under 42 USC §§ 7401-7671q, CAA and waste management under 42 USC §§ 6901-6992, RCRA, for both current mission operations and projected mission growth. **(T-0)**. Based on the permit review, the Installation Environmental Element will initiate permit modifications or changes through AFCEC/CZ, ANGRC or AFRC as needed. **(T-1)**.
- 2.16.8. Coordinate with base civil engineering construction managers, MAJCOM proponents, and AFCEC (or ANGRC or AFRC) MILCON project managers as early as practicable to ensure all necessary environmental permits are planned and procured. **(T-1)**. This includes ensuring project managers and construction agents for MILCON projects appropriately plan for project funds and permit fees.
- 2.16.9. Coordinate and accomplish EIAP and General Conformity assessments as early as practicable with proponent organizations initiating AF actions. **(T-3)**. See **Paragraph 4.6.4.2**
- 2.16.10. Ensure comments on federal, state, and local proposed rules, revisions, plans, protocols, permits, and negotiations with federal, state, and local regulatory agencies regarding installation-specific issues (e.g., variances, permit limits and operating conditions) are coordinated through the chain-of-command, including with AFCEC/CZ. **(T-1)**.
- 2.16.11. Coordinate permits, open enforcement actions (EAs), and other applicable documents and actions with the installation JA office and AFCEC/CZ. **(T-1)**. For ANG and AFRC, also coordinate with the MAJCOM JA. **(T-2)**.

2.16.12. Coordinate with the installation contracting function to ensure the applicable regulatory requirements clauses and other appropriate conditions (E.O.s, directives, AF requirements, etc.) are included in all contracts. **(T-1)**.

2.16.13. Coordinate with Base Bioenvironmental Engineer (BEE) on any environmental episodes or issues (e.g. spills, leaks, releases, compromised storage tank integrity, new emissions sources, or changes to existing emissions sources) that could potentially require an occupational and environmental health risk assessment. **(T-1)**. This is done in accordance with AFI 48-145, *Occupational and Environmental Health Program*, as well as any resulting actions to address unacceptable health hazards identified by those assessments.

2.16.14. Inform the installation Public Affairs office of any violations or follow-up corrective actions, or other issues, impacting the base populace or local civilian community. **(T-3)**.

2.16.15. Lead the HMMP team and designate a Safety Data Sheet (SDS) gatekeeper to ensure SDSs not loaded in the Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS) are forwarded to the approved AF EESOH-MIS SDS Data Steward. **(T-1)**.

2.16.16. For Air Quality and Resource Management:

2.16.16.1. Establish installation-level procedures to document compliance with 40 CFR **Part 51**, Subpart W, and 40 CFR **Part 93**, Subpart B, for those installations located in areas that have been classified as either nonattainment or maintenance. **(T-0)**.

2.16.16.2. Conduct air quality EIAP assessments required by 32 CFR **Part 989** and using guidance in this manual. **(T-0)**. Supplemental non-directive guidance and recommended best practices from AFCEC/CZ are also available in the “Air Force Air Quality Environmental Impact Analysis Process Guide”. Guide is available on the AFCEC’s SharePoint® site, “eDASH,” accessible via the AF CE Portal.

2.16.16.3. Ensure the installation Air Emissions Inventory (AEI) and Potential-to-Emit (PTE) emissions are explicitly documented as required, periodically updated, and reflected in the installation’s specific SIP emission budget, consistent with 40 CFR **Part 70**. **(T-0)**. Installation baseline emissions inventory can be used to determine if proposed physical or operational changes to stationary sources require “netting” or offset requirements under New Source Review and other CAA programs.

2.16.16.4. Ensure air quality compliance and resource management-related data are verified and maintained in the standard AF-approved tracking system, APIMS. **(T-1)**. Included is data needed to build the AEIs; operating permits data, air emission source information (key top emitters by source categories such as internal combustion engines and boilers/process heaters); compliance data; vehicle inspection and maintenance certifications; and other pertinent air resource management information including decomposition of permit requirements and associated checklists.

2.16.16.5. Ensure owners/operators of air emission sources have operational procedures in place to maintain compliance with required maintenance and work practice standards from statutory requirements such as 40 CFR **Part 60** and 40 CFR **Part 61**, *National Emission Standards for Hazardous Air Pollutants* under the CAA. **(T-0)**.

2.16.16.6. Initiate and submit air quality related proposed NSEs under 40 CFR Part 1068, *General Compliance Provisions for Highway, Stationary, and Non-road Program*, Subpart C: *Exemptions and Exclusions*, for suspending compliance requirements which restrict military mission and training needs to AFCEC/CZ for verification and processing. **(T-1)**. The approval of the NSE will depend on the extent to which national security could be compromised. Once validated by AFCEC/CZ, the NSE will also be coordinated with AFLOA/JACE before being processed for final installation approval and external submission, if applicable. **(T-1)**.

2.16.17. Environmental Inspection Process: Conduct periodic compliance self-assessments in accordance with AFI 32-7001, using shop-level and programmatic inspection checklists, and document inspections and findings in the APIMS (air quality non-compliance findings) and the Findings Tracker tool on the AFCEC SharePoint® site, “eDASH”. **(T-1)**.

2.17. Installation Staff Judge Advocates (JA), or NGB JA for ANG and MAJCOM/JA for AFRC, will:

2.17.1. Report all enforcement actions (EAs) and host nation EAs to AFLOA/JACE, the MAJCOM Staff Judge Advocate (SJA), and the appropriate environmental organizations in accordance with AFI 32-7001 and AFI 51-301, *Civil Litigation*. **(T-1)**.

2.17.2. Review draft permits and proposed federal, state, and local rules and protocols and provide comments to the Installation Environmental Element. **(T-1)**.

2.17.3. Coordinate permit, enforcement action/host nation enforcement action, and other documents and actions involving government regulatory agencies with the MAJCOM JA and AFCEC/CZ. **(T-1)**.

2.17.4. Request approval from AFLOA/JACE (through the MAJCOM JA) for any settlement where the terms include provisions for the payment of fines or supplemental environmental projects. **(T-1)**.

2.17.5. Provide consultation for appropriate aspects of the installation environmental compliance program (to include permits, compliance requirements, and funding) and coordinate with the MAJCOM JA, as appropriate. **(T-1)**.

2.17.6. Assist in negotiating environmental compliance permit limits and operating performance measures, and any appropriate agreements with regulators, in close coordination with the Installation Environmental Element. **(T-1)**.

2.17.7. Ensure that the proper AF “Responsible Official,” or similar designation, certifies state and local permits and other legally required documents consistent with Title V of the CAA. **(T-0)**. Certification responsibility cannot be delegated.

2.18. The Air Force Institute of Technology (AFIT) Civil Engineer School will, in coordination with AFCEC/CZ, provide educational/training programs in support of environmental compliance, pollution prevention and hazardous material management. (T-1). Consult with AFCEC and ANGRS SMEs and AF/A4C on environmental course content, policy matters and target audiences.

Chapter 3

HAZARDOUS MATERIAL MANAGEMENT

3.1. General Requirements - Hazardous Materials Management Process (HMMP). Hazardous materials management responsibilities are distributed across the core AF functions of Acquisition, Logistics Readiness (Transportation Cargo Movement and Materiel Management), Maintenance, Civil Engineer, Surgeon General, Safety (SE), and Contracting. The Hazardous Material Management Process coordinates these distributed functional activities and responsibilities to enable effective AF enterprise-wide hazardous materials management and oversight. Any unit that uses hazardous material (HAZMAT) must be supported by a HAZMAT Tracking Activity (HTA), where inventory receipt and issue data are captured into EESOH-MIS. **(T-1).**

3.1.1. HMMP Purpose. The HMMP is an essential process of the AF Environmental Management System (EMS), established in response to DoD Environmental, Safety and Occupational Health (ESOH) requirements implemented by AFD 90-8 (see AFI 32-7001). It coordinates and integrates the AF activities and infrastructure required for the ongoing identification, authorization and tracking of hazardous materials.

3.1.2. HMMP Objectives. The HMMP accomplishes these activities by implementing and sustaining the effective management and minimization of AF dependence on hazardous materials within acceptable levels of mission and environment, safety, and occupational health risk, while reducing associated total ownership cost. The specific objectives of the HMMP will be to:

3.1.2.1. Establish a collaborative framework for collecting and maintaining HAZMAT data using EESOH-MIS. **(T-1).**

3.1.2.2. Support compliance with applicable hazardous materials management laws and report hazardous material information to EPA and emergency planning and response authorities consistent with E.O. 13834 and the Emergency Planning and Community Right-to-Know Act (EPCRA), and minimize the use of hazardous materials. Support compliance with DoDI 4715.06, *Environmental Compliance in the United States*. **(T-0).**

3.1.2.3. Provide a key part of the installation's Waste Minimization Program to meet 42 USC §§ 6901-6992, *RCRA* requirements. **(T-0).**

3.1.2.4. Serve as a key information resource allowing the AF EMS at all levels to develop plans, establish aspect inventories, identify impacts, set objectives and targets, and monitor implementation of corrective actions. **(T-1).**

3.1.3. HAZMAT Definition and Exceptions. For purposes of this AFMAN, the term HAZMAT includes all items that are:

3.1.3.1. Covered under EPCRA or other applicable Overseas Environmental Baseline Guidance Document (OEBGD) or country-specific FGS, federal, state, or local tracking or reporting requirements;

3.1.3.2. Covered under 29 CFR **Part 1910.1200**, *Hazard Communication* or 29 CFR **Part 1910.1450**, *Occupational Exposure to Hazardous Chemicals in Laboratories*;

3.1.3.3. Class I or Class II ODS. Manufactured chemicals, such as Chlorofluorocarbons, Hydrochlorofluorocarbons and Halons.

3.1.3.4. **Exceptions:** The term hazardous materials, as used in this AFMAN, excludes: Munitions, as defined by AFMAN 21-201, *Munitions Management*; unexpired pharmaceuticals managed by an installation pharmacy or formulary; radioactive materials (RAM), as defined in and managed in accordance with AFMAN 40-201; and HW. See AFMAN 91-201, *Explosives Safety Standards*, for ammunition and explosives safety management responsibilities. Installations must take advantage of existing regulatory exemptions, in particular concerning consumer commodities, in application of this definition to avoid the unnecessary tracking of common consumer commodities and janitorial supplies. (T-3).

3.1.4. AF HAZMAT Guidance Linkages. This AFMAN is not the *governing* publication for all aspects of AF HAZMAT management. It provides cross-functional, *coordinating* procedures that connect functional AF HAZMAT management policies, standards, and procedures. This AFMAN supplements those publications with additional guidance on the authorization and tracking of HAZMAT. The key publications that are the authoritative sources of functional guidance that can be used in conjunction with this AFMAN include:

3.1.4.1. HAZMAT Management – AFI 23-101, *Air Force Materiel Management*; AFMAN 23-122, *Materiel Management Procedures*; AF Joint Manual (AFJMAN) 23-209 (DLAI 4145.11), *Storage and Handling of Hazardous Materials*; AF Handbook (AFH) 23-123V1, *Materiel Management Reference Information*.

3.1.4.2. HAZMAT-related Occupational Safety and Health – AFI 48-145; AFI 90-821; AFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, and DoDI 6050.05.

3.1.4.3. Weapon System Life Cycle HAZMAT Reduction and Management – AFI 63-101/20-101, *Integrated Life Cycle Management*; Technical Order (TO) 00-5-1, *Air Force Technical Order System*, **Chapter 9**, “Recommending Changes to Technical Orders.”

3.1.4.4. HAZMAT Transportation – AFI 24-602V2, *Cargo Movement*; AFMAN 24-204, *Preparing Hazardous Materials for Military Air Shipments*; AFMAN 24-210, *Packaging of Hazardous Material*.

3.2. Establishing and Running Installation Hazardous Material Management Process (HMMP) Teams.

3.2.1. The cross-functional installation HMMP team is formally chartered by the Environment, Safety, and Occupational Health Council (ESOHC) chair. The team charter will identify HMMP team members and frequency of meetings. Individual team members are also responsible for reporting to their functional chain of command on HMMP issues. Geographically Separated Units (GSUs) may be supported by the supporting installation HMMP. MAJCOM functionals will assist their counterparts on installation HMMP teams with policy, resource advocacy, and conflict resolution.

3.2.2. HMMP Team Composition. The core HMMP team will include representatives from base civil engineering (representing related environmental programs), Surgeon General, Safety, and HAZMAT Tracking Activity supervisors. (T-1). Representative from the

Installation Environmental Element will lead the HMMP team. **(T-1). Note:** Based on local agreement and informing the ESOHC this role can be rotated amongst the core team members. The HMMP team lead, in consultation with core team members, will designate a Safety Data Sheet (SDS) gatekeeper to ensure SDSs not loaded into EESOH-MIS are forwarded to the approved AF EESOH-MIS SDS Data Steward. **(T-1).** Other functional areas such as Fire Department, Contracting, Legal, Logistics Readiness (Material Management and Transportation Cargo Movement), Maintenance, Finance, Requirements, Plans, Manpower, Public Affairs, hazardous materials users, Communications and Information, tenant organizations, or any other installation stakeholders, such as work area supervisors, are also members of the HMMP team, as required. Contracted functions may have contractor representation on the HMMP team.

3.2.3. HMMP Related Training. Ensure HMMP team personnel obtain and document applicable hazardous materials training requirements in accordance with AF, OSHA, applicable environmental standards, and local requirements. The Air Force Institute of Technology (AFIT) Civil Engineer School will conduct a course on the HMMP and integrate HMMP training into other AFIT courses as appropriate. **(T-1).** The HTA supervisors and HMMP team members will use the AFIT Civil Engineer School's HMMP Course (WENV-222) as the primary source of Hazardous Material training from the environmental and ESOH perspective. **(T-1).** See the Hazardous Materials program page on the AFCEC's SharePoint® site, eDASH, for a listing of hazardous materials training and training sources. Also, HMMP team members need to be familiar with both EESOH-MIS and the self-inspection checklists. As the most decentralized form of procurement, installations organizations will ensure Government Purchase Card (GPC) training includes hazardous material procurement guidance. **(T-1).** The HMMP team will assist the agency/organization GPC program coordinator in accordance with AFI 64-117, *Government Purchase Card Program*, to develop training and/or train the procurement, maintenance and disposal of hazardous materials. **(T-1).**

3.3. Installation HAZMAT Management Guidance and Procedures. At the installation-level, HAZMAT management functions as a partially decentralized operation managed and led by the HMMP team. This AFMAN uses the term installation as defined in 10 USC § 2801, *Military Construction, Definitions*: a base, camp, post, station, yard, center, or other activity under the jurisdiction of the Secretary of the AF or, in the case of an activity in a foreign country, under the operational control of the Secretary of the AF, without regard to the duration of operational control. Adjacent Federal facilities, which are outside an AF installation's fence line and for which the AF is not responsible for environmental reporting or other environment, safety, and occupational health liabilities will not be included in the installation's HMMP. **(T-1).**

3.3.1. HAZMAT Tracking Activity (HTA). Any unit that uses hazardous materials must be supported by an HTA, where inventory receipt and issue data are captured in the Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS). **(T-1).** Each installation must have at least one HTA established by, and accountable to, the Logistics Readiness Squadron (LRS) commander or equivalent. **(T-1).** No hazardous or potentially hazardous material will be procured using GPC without full compliance with all authorizations, approvals, and reporting requirements specified in accordance with AFI 64-117. **(T-1).** In addition, HTAs shall be established within other organizations that procure and use HAZMAT separate from LRS. **(T-1).** Installations, such as GSUs, that are supported by

another location are not required to have a separate HTA. All HTA activities (whether contractor or government operated) shall:

3.3.1.1. Ensure that all requests for HAZMAT have an authorization prior to issue. **(T-1)**.

3.3.1.2. Immediately forward to the HMMP team information on any requested material that may be considered hazardous, and not currently tracked in EESOH-MIS, for further evaluation and inclusion in future tracking. **(T-1)**.

3.3.1.3. Track the receipt and issue of hazardous materials in EESOH-MIS. **(T-1)**. **Note:** For hazardous materials processed through the Inbound Cargo Activity, tracking in EESOH-MIS is in addition to Transportation receipt activities and management activities required by AFI 24-602V2 and AFMAN 24-210.

3.3.1.4. Record the receipt of hazardous materials against the correct SDS in EESOH-MIS. **(T-1)**. Forward SDSs not already loaded into EESOH-MIS to the installation SDS gatekeeper. **(T-1)**. This will ensure the appropriate SDS and hazardous material information is conveyed to the DoD Enterprise Data Repository consistent with DoDI 6050.05.

3.3.1.5. Minimize hazardous materials usage or waste by reusing/redistributing excess hazardous materials through Free-issue programs, or through the Defense Logistics Agency (DLA) Reutilization, Transfer, Donation, and Sales program. **(T-1)**. This can be done by determining if it is possible to obtain the hazardous materials from the installation free-issue, reuse, or other redistribution program, as the preferred procurement source for hazardous materials.

3.3.1.6. Perform the following minimum issue and turn-in services for out-of-production Class I Ozone Depleting Substance (ODS). **(T-1)**. More detailed non-directive guidance and best management practices can be found in the non-directive HAZMAT management playbook published on the AF CE Portal.

3.3.1.6.1. Forward to the MAJCOM or ANGRC A4 Halon focal point for special approval of Halon requisition requests that surpass the quantity threshold in **Paragraph 3.3.5.1.1.5**. **(T-1)**.

3.3.1.6.2. Assist units with the supply procedures needed to turn-in excess and unserviceable Class I ODS to the Defense Reserve. **(T-3)**.

3.3.1.7. Assist users in identifying HAZMAT stock numbers and/or part numbers **(T-3)**.

3.3.1.8. Comply with HMMP Team-developed procedures as applicable. **(T-3)**.

3.3.2. HAZMAT Monitoring Process. The HMMP Team shall establish local procedures to ensure that material brought onto the installation, regardless of procurement pathway, source of supply (e.g., LRS, Medical Logistics, CE Material Control) or user (e.g., government or contractor), is evaluated to determine whether it is a hazardous material, and if it is, to ensure it is authorized and tracked. **(T-1)**.

3.3.2.1. Material monitoring procedures below need to be consistent with the LRS procedures in AFMAN 23-122, for hazardous materials procured through them. Other organization HTAs will also have monitoring procedures to ensure all materials are accurately vetted and monitored. **(T-1)**.

3.3.2.2. The Installation HMMP team shall ensure local material monitoring procedures incorporate the following minimum requirements:

3.3.2.2.1. The installation HTA that receives a customer request for a material item which meets any of the criteria below, will redirect the customer to submit a request for hazardous materials determination and authorization in accordance with the procedures established under **Paragraph 3.3.3. (T-1)**.

3.3.2.2.1.1. The item is managed in the Federal Logistics Information System and has been evaluated for an Issue Exception code assignment. The item has a National Stock Number (NSN) with an Issue Exception Code of 9.

3.3.2.2.1.2. The item is managed in the Federal Logistics Information System and has a Hazard Characteristics Code. The item has an NSN with a Hazard Characteristics Code.

3.3.2.2.1.3. The item falls within a Federal Supply Class listed in Federal Standard 313 (FED-STD-313F), *Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities*.

3.3.2.2.1.4. The item meets other installation-established criteria.

3.3.2.2.1.5. Above criteria would not apply if the requestor is already authorized to use the material in EESOH-MIS or the material has been specifically exempted from authorization and tracking by the installation HMMP team.

3.3.2.2.2. Identify installation-specific procedures and contract requirements (for inclusion in contract documents) to ensure hazardous materials brought onto the installation by contractors are properly authorized, managed, and tracked, to include completion of appropriate contract close-out actions to remove left-over HAZMAT from the installation. **(T-1)**. Recommend specific clauses and other contract provisions, wherever possible. Work with the contracting office to incorporate these recommendations into installation contract writing procedures, since solicitation provisions and contract clauses are typically selected using the semi-automated Clause Logic Service which relies on pre-formatted questions and answers. Therefore, it may be necessary to work with the contracting office to manually include HMMP clauses and provisions in installation contract documents. After contract award and before the contractor begins performance, work with the Contracting Officer's Representative (COR) to assure that the COR understands all HMMP contract requirements and monitor contractor actions for compliance with applicable HMMP requirements. **(T-1)**. The following contract clauses should be considered for inclusion in installation contracts:

3.3.2.2.2.1. Federal Acquisition Regulation (FAR) Clause 52.223-3, *Hazardous Material Identification and Material Safety Data*.

3.3.2.2.2.2. FAR Clause 52.223-5, *Pollution Prevention and Right-to-Know Information*.

3.3.2.2.2.3. FAR Clause 52.223-7, *Notice of Radioactive Materials*;

3.3.2.2.2.4. FAR Clause 52.223-19, *Compliance with Environmental Management Systems*.

3.3.2.2.5. AF FAR Supplement Clause 5352.223-9001, *Health and Safety on Government Installations*.

3.3.2.2.3. Procedures to ensure that the hazardous materials monitoring process does not impede time-critical mission-essential material requests. **(T-3)**.

3.3.2.2.4. HMMP requirements are integrated into support agreements in accordance with procedures outlined in AFI 25-201, *Intra-Service, Intra-Agency, and Inter-Agency Support Agreements Procedures*. **(T-1)**.

3.3.2.2.5. In addition, the HMMP team will identify as early as possible emerging chemicals being used, or planned to be used by the installation, in accordance with DoDI 4715.18, *Emerging Chemicals (ECs) of Environmental Concern*. **(T-0)**. This can be done by implementing local tracking and reporting requirements for specific ECs identified by DoD or the AF.

3.3.3. HAZMAT Determination and Authorization Process. All potential hazardous materials must be evaluated using the process described in this section to determine if authorization and tracking is required for use on the installation. **(T-1)**. Unit Commanders are ultimately responsible for ensuring all unit procurement of hazardous materials is authorized and tracked. HAZMAT Tracking Activities (HTA) do not require separate authorizations to perform the supply functions of ordering, receiving, stocking, and storing hazardous materials, regardless of the procurement method (e.g., GPC, AF Form 9, or any DoD standard supply system). Support agreements may specifically delegate CE, SE, and/or BE authorization responsibilities to the tenant. Even if the base delegates civil engineer authorization authority to a tenant unit, the tenant unit must still notify the BCE of all hazardous materials requests before final authorization. **(T-1)**.

3.3.3.1. A supervisor's certification is needed for first time authorization of a new material and any subsequent changes to the process (details on frequency, justification, material handling, or materials), and for use of hazardous materials in a new process.

3.3.3.1.1. Work area supervisors must notify the HMMP team of any changes to the information on an authorization. **(T-1)**. Work area supervisors must also ensure workers comply with all conditions of use identified on approved authorizations. **(T-1)**.

3.3.3.1.2. Work area supervisors will work with the Time Compliance Technical Order monitor or the Time Change monitor to ensure all HAZMAT contained in Time Compliance Technical Order kits are properly identified and controlled. **(T-1)**.

3.3.3.1.3. For any requested material that is not currently loaded in EESOH-MIS, the Authorizing Offices on the HMMP team (Civil Engineer, Safety, and BE) will determine whether it meets the hazardous materials definition in [Paragraph 3.1.3](#). **(T-1)**. If the Authorizing Offices determine that the material does not meet the hazardous materials definition, then the material may be exempt from authorization and tracking in accordance with this AFMAN. The Authorizing Offices may add the material to the installation's "exempt" list to avoid future requests for review.

3.3.3.1.4. All the Authorizing Offices must unanimously exempt the material from tracking for all shops and all units. **(T-1)**.

3.3.3.2. The Authorizing Offices shall require the use of the least hazardous available material to the extent reasonably possible **(T-3)**. For hazardous materials that drive a significant aspect or impact, requiring activities must make every effort to find an alternative, and if use required by Technical Orders, will submit a candidate process (see Hazardous Material Management CE Playbook for non-directive guidance and best practices for the candidate process instructions). **(T-3)**.

3.3.3.3. Each of the Authorizing Offices shall make an independent determination on whether to authorize the process and HAZMAT use as specified by the requestor, authorize with additional restrictions, or not authorize the request. **(T-1)**. **Note:** New Safety Data Sheets (SDS) for NSNs are loaded into EESOH-MIS by the Data Stewards at the time of receipt, not as a consideration for a new authorization. The tracking system provides reviewers with SDSs previously received on any installation for the requested stock number.

3.3.3.3.1. If one of the Authorizing Offices does not approve the authorization, then the request is denied.

3.3.3.3.2. Authorizing Offices can choose to blanket authorize a hazardous material in EESOH-MIS, allowing future authorization requests for that material to be automatically proxy-authorized by the user flagging the material as blanket authorized. The users name will continue to be stamped on any future authorizations for that material, in any process, any shop. Transactions for these materials are still tracked in EESOH-MIS. This allows lower-risk materials to be tracked on the installation for one of the Authorizing Offices without adversely impacting the review workload of all of the Authorizing Offices.

3.3.3.3.3. In the case of requests by a contractor operated shop, the civil engineer authorization in EESOH-MIS is for Environmental, Fire Emergency Services, and emergency response purposes. The Safety and Occupational Health reviews are for informational purposes only, and do not involve evaluation and approval of the contractor's process related to Safety and Occupational Health assessment.

3.3.3.4. Once all Authorizing Offices approve an authorization, the requestor can proceed with procurement through its servicing HTA.

3.3.3.5. The requestor must comply with all restrictions specified by the Authorizing Offices. **(T-1)**.

3.3.3.6. The following situations are exempt from AF HAZMAT Authorization and Tracking:

3.3.3.6.1. Hazardous materials, procured for overseas installations by host nation personnel for facility maintenance, do not require authorization or tracking using EESOH-MIS, however, an Environmental, Safety, and Occupational health review is recommended prior to use.

3.3.3.6.2. Hazardous materials, procured for overseas installations by contractor personnel for DoD component facility maintenance, do not require authorization or tracking using EESOH-MIS. However an Environmental, Safety and Occupational review is recommended prior to use.

3.3.3.6.3. Hazardous materials, procured by a non-DoD tenant for a non-DoD mission, does not require authorization or tracking using EESOH-MIS.

3.3.4. Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS). Installation HAZMAT users, HMMP teams, Environmental, Safety and Occupational Health functionals, and other installation personnel shall use EESOH-MIS to request, authorize, and track HAZMAT. **(T-1)**.

3.3.4.1. During periods where EESOH-MIS is not available, the Installation HMMP team will develop alternate procedures to manage HAZMAT authorization and tracking information. **(T-1)**. Once EESOH-MIS service is restored, hazardous materials transactions and authorizations can be entered into the tracking system.

3.3.4.2. The HMMP team shall implement a management effort to provide for the quality assurance of EESOH-MIS data upon which the effectiveness and efficiency of the HMMP depends. **(T-1)**.

3.3.5. Additional Installation-level HAZMAT Management Considerations.

3.3.5.1. Ozone Depleting Substances (ODS). Under international agreements and Federal Law, Class I ODS have been out-of-production in the U.S since 1995. Class II ODS are to be completely phased-out of production between 2020 and 2030. The non-directive hazardous materials management playbook published on the AF Civil Engineer Portal contains a list of ODS materials and additional installation-level ODS management guidance. In addition, AFCEC will issue additional non-directive Air Quality Refrigerant Management Guidance with information on CAA impacts on the management of installation-level air conditioning and refrigeration equipment. **(T-1)**.

3.3.5.1.1. Class I ODS are critical to AF mission capability, and are stockpiled at the ODS Defense Reserve operated by DLA.

3.3.5.1.1.1. Per DoD policy (DoDI 4715.06), use of any Class I ODS not required by a formal technical document (e.g., Technical Order or commercial technical manual) is strictly prohibited. **(T-0)**.

3.3.5.1.1.2. As a result, installations are prohibited from purchasing Class I Ozone Depleting Substances (ODS) from commercial vendors. **(T-0)**.

3.3.5.1.1.3. Per DoD policy, DoDI 4715.06, Class I ODS will only be made available for mission critical weapon systems, therefore, Class I ODS requirements for facility air conditioning or refrigeration, or for fire suppression systems, must be met only from existing facility installed base or civil engineer stocks. **(T-0)**. Access to the ODS Defense Reserve for facility requirements is prohibited. Transfer of Civil Engineer Class I ODS stocks between AF installations to meet facility requirements is permitted.

3.3.5.1.1.4. AF Hush Houses (engine and aircraft noise suppressing enclosures) that use Halon 1301 fixed fire suppression systems cannot access the ODS Defense Reserve stockpile, internal base Civil Engineer Halon 1301 supplies, or commercial purchases of Halon 1301. If a hush house Halon 1301 fixed fire suppression system becomes inoperable due to loss of Halon, the installation will (1) replace the fixed fire suppression systems with one of the non-Halon alternative designs approved

by the Warner Robbins, Air Logistics Center, hush house program office or (2) recharge the Halon 1301 fixed fire suppression systems using only supplies of Halon 1301 that were installed in one of the other AF Hush House fixed fire suppression systems as of 1 January 2008. **(T-1)**.

3.3.5.1.1.5. Only the Logistics Readiness Squadron HTA may obtain and issue ODS from the Defense Reserve. Requisitions that exceed specified thresholds for each ODS product are cancelled by the ODS Defense Reserve program office unless prior AF approval has been forwarded to the Defense Logistics Agency. For requisitioning quantities above the thresholds, the Logistics Readiness Squadron HTA shall work with the requestor to obtain ODS requisition approvals through the designated MAJCOM or NGB/A4 Halon focal point. **(T-1)**. See the ODS Defense Reserve website for requisitioning procedures, thresholds, and logistical protocols (see Glossary). **Note:** Installations will not submit multiple sequential requisitions in order to avoid breaking the automatic cancellation thresholds. **(T-1)**. The HAF HMMP team monitors monthly ODS Defense Reserve requisition reports, and will follow-up with installation HMMP teams on any requisitions that deviate from appropriate ordering patterns.

3.3.5.1.1.6. Other than Halon used in an emergency response, Class I, Class II ODS, or other non-exempt substitute refrigerants, cannot be intentionally vented or discharged to the atmosphere in accordance with 40 CFR **Part 82**. As a result, Refrigerant managers or other operators will inform the Installation Environmental Element of any inadvertent releases from work area facilities, equipment, or processes, and comply with applicable federal, state, and local reporting requirements. **(T-0)**.

3.3.5.1.1.7. Installations will not transfer any Class I ODS and R-22 (CFCs, Halon and HCFC-22) out of government ownership in accordance with DoDI 4715.06, with the exception of used solvents. **(T-0)**. See the ODS Defense Reserve website for turn-in procedures and logistical protocols.

3.3.5.1.1.8. Unless the requiring activity obtains approval from the HAF HMMP team, an AF organization will not establish a contractual requirement to procure products that require the use of a Class I ODS in their operations and maintenance. **(T-1)**.

3.3.5.1.2. The AF does not centrally stockpile Class II ODS to support continuing requirements after the phase-out of Class II ODS production in the U.S.

3.3.5.1.2.1. BCE/Other organizations shall not procure new facility systems scheduled to remain in the AF inventory beyond 1 January 2020 that require Class II ODS in their operations or maintenance. **(T-2)**. AF activities must select alternatives that are EPA-Significant New Alternatives Policy (SNAP) program-approved with an ozone depleting potential of zero in accordance with 40 CFR **Part 82**, Subpart G, *Significant New Alternatives Policy Program*. Activities should also select low-global-warming-potential alternatives when feasible.

3.3.5.1.2.2. Installations will not transfer Hydrochlorofluorocarbons-22 (HCFC-22) out of government ownership for any reason, although transfers between

installations is permitted. **(T-1)**. As required by DoDI 4715.06, installations shall turn-in all AF excess or unserviceable HCFC-22 to the Defense Logistics Agency (DLA) ODS Defense Reserve stockpile in order to support future DoD mission critical needs. **(T-0)**.

3.3.5.1.3. Refrigerant Management. In addition to the above requirements for ODS applicable to refrigerants, AF refrigerant managers (typically within installation CE) or vehicle maintenance personnel will ensure the following:

3.3.5.1.3.1. Maintenance. Conduct maintenance, service, repair, disposal, leak monitoring, and recordkeeping on equipment or appliances containing Class I or II ODSs or other non-exempt substitutes for these refrigerants (e.g., Hydrofluorocarbons) as required under 40 CFR, **Part 82**, Subpart B, *Servicing of Motor Vehicle Air Conditioners* and Subpart F, *Recycling and Emissions Reduction*. **(T-0)**.

3.3.5.1.3.2. Refrigerant Recovery. Intentional release of ODS refrigerants or other non-exempt substitutes, while maintaining, servicing, repairing, or disposing of air-conditioning or refrigeration equipment is prohibited in accordance with 40 CFR **Part 82**, Subpart F. **(T-0)**. Activities must use EPA-approved refrigerant recovery equipment and must certify to the appropriate EPA regional office, in accordance with 40 CFR **Part 82**, Subpart F. **(T-0)**. Overseas activities are not required to submit this certification, but must use EPA-approved refrigerant recovery equipment if available. If EPA-approved equipment is not available, then locally available recovery equipment that achieves performance comparable to EPA-approved recovery equipment can be used.

3.3.5.1.3.3. Refrigerant Technician Certification. All AF military and civilian refrigerant technicians, except for motor vehicle technicians, must be certified in accordance with 40 CFR **Part 82**, Subpart F. **(T-0)**. Proof of such certification must be readily available at the work place. **(T-1)**. Technicians may require additional State or local certifications if they are more stringent than Federal certification. The applicable host-nation Final Governing Standard should be consulted to determine if the host nation has certification requirements for personnel at overseas bases or foreign nationals.

3.3.5.1.3.4. The owners or operators of refrigerant appliances must maintain on-site records related to leak-repair in accordance with 40 CFR **Part 82.166**, *Reporting and recordkeeping requirements for leak repair*, and report to EPA the information specified in 40 CFR **Part 82.166(n)**. **(T-0)**.

3.3.5.1.4. Motor Vehicle Technician Certification. All AF military and civilian motor vehicle maintenance technicians performing service and repair work on motor vehicle air conditioning systems must be certified in accordance with 40 CFR **Part 82**, Subpart B. **(T-0)**. United States certification requirements do not apply to foreign nationals working on AF vehicles overseas. The applicable host-nation Final Governing Standard should be consulted to determine if the host nation has certification requirements for personnel at overseas bases or foreign nationals.

3.3.5.2. HAZMAT Deployment Planning. In planning for deployments, Installation Deployment Officers (IDOs) and Unit Deployment Managers (UDMs) shall notify the HMMP team of upcoming deployments so that the HMMP team can coordinate the following HAZMAT management tasks. **(T-1)**. **Note:** For additional guidance, refer to AFH 10-222, Volume 4, *Environmental Considerations for Overseas Contingency Operations*; AFI 10-403, *Deployment Planning and Execution*; and AFI 10-404, *Base Support and Expeditionary Site Planning*.

3.3.5.2.1. Pre-Deployment Requirements.

3.3.5.2.1.1. IDOs or UDMs will identify deploying unit Class I ODS (materials and amounts) required for the duration of the deployment, and ensure that pre-approvals are in-place if the unit will need to requisition quantities greater than 3,000 pounds. **(T-1)**. **Note:** Class I ODS for deployed units are supplied by the DLA ODS Defense Reserve stockpile and issued through either the gaining installation HAZMAT Tracking Activity (HTA) or through the deployed unit with hazardous materials management responsibilities.

3.3.5.2.1.2. IDOs or UDMs will coordinate the execution of hazardous materials management, tracking, and reporting responsibilities (for the duration of the deployment) with gaining MAJCOM/Theater Command and/or deployment location. **(T-3)**. In particular, pre-deployment planning must assign responsibility for the tracking of out-of-production Halon received during deployment so that the AF can account for and return any unused quantities of Class I ODS to the Defense Reserve Stockpile for use in future deployments. **(T-1)**.

3.3.5.2.1.3. The work area supervisor or unit commander shall ensure that a deployment folder is assembled for each unit Mission Support Kit that contains hazardous materials. **(T-1)**. This folder includes as a minimum:

3.3.5.2.1.3.1. Copies of the current manufacturer-specific SDS for each HAZMAT the deploying unit plans to use.

3.3.5.2.1.3.2. Approved authorizations for the material from the Enterprise Environmental, Safety, and Occupational Health-Management Information System (EESOH-MIS), listing warnings and precautions.

3.3.5.2.1.4. Ensure that HAZMAT received for War Readiness Materiel storage is tracked by EESOH-MIS for the purposes of knowing where and how much War Readiness Materiel HAZMAT is on an installation. **(T-1)**.

3.3.5.2.2. Deployment Requirements. Deploying units will track hazardous materials usage data for the duration of the deployment in accordance with pre-deployment planning arrangements **(T-1)**. Use EESOH-MIS, if available, for this.

3.3.5.2.3. Re-Deployment Requirements.

3.3.5.2.3.1. Re-deploying units will notify the HTA at the deployed location, if available, of any serviceable hazardous materials the deployed unit is taking back to the home station. **(T-1)**.

3.3.5.2.3.2. Re-deploying units will update the home station EESOH-MIS upon return from the deployment to reflect all hazardous materials the deployed unit

brought back to the installation. **(T-1)**.

3.3.5.2.3.3. Unit commanders will ensure proper identification and disposition of excess hazardous materials in accordance with 40 CFR Parts 261-262. **(T-0)**.

3.3.5.2.3.4. The HTA will ensure all excess Class I ODS is returned to the ODS Defense Reserve stockpile (operated by DLA) in accordance with DoDI 4715.06. **(T-0)**.

3.3.5.3. Privatizing or Outsourcing Installation HMMP Functional Responsibilities. Any aspect of the installation HMMP functional responsibilities, including the HAZMAT Tracking Activity and HAZMAT authorization responsibilities, can be performed by contractors.

3.3.5.3.1. The individual functional office (Civil Engineer, Maintenance, Supply, etc.) initiating the outsourcing action remains responsible for the performance of installation-level functional requirements, and must exercise appropriate and adequate contractor performance oversight. **(T-1)**.

3.3.5.3.2. The HMMP team shall work with the requiring activity and the contracting office to ensure that these contracts include specific requirements to comply with applicable federal and military procurement policies and perform specific functional tasks identified in this AFMAN. **(T-1)**.

3.3.5.4. Environmental Management System (EMS) Continual Improvement and HAZMAT Material Substitution. Installation HMMP teams shall work with the installation EMS Cross-functional Team to support the following EMS continual improvement activities. **(T-1)**.

3.3.5.4.1. Plan. Use EESOH-MIS data on HAZMAT processes, locations, and quantities to develop and update aspect inventories and to initiate action plans to reduce environmental impacts, consistent with installation priorities, through HAZMAT reduction and material substitution.

3.3.5.4.2. Do. Use the HMMP as a source of environmental controls and as a method of pollution prevention. When requesting HAZMAT, work area supervisors and authorizers collaborate to ensure that the shop requests the least hazardous material allowed to be used in a particular process in the smallest reasonable quantity that meets mission needs.

3.3.5.4.3. Check. Periodically review EESOH-MIS data to ensure the installation is protecting workers and the environment and meeting AF, MAJCOM, and installation HAZMAT management objectives and targets.

3.3.5.4.4. Act. Implement corrective actions, as necessary.

3.3.5.4.5. Weapon System HAZMAT Material Substitution. In order to substitute less hazardous materials for HAZMAT used in support of weapon systems as a part of installation objectives, installation HMMP teams support work area supervisors in the submission of recommended changes to Technical Orders using AF Technical Order Forms 22 and the change processes in Technical Order 00-5-1. **Note:** in accordance with Technical Order 00-5-1, replacements for HAZMAT and ODS are submitted as “urgent” priority change recommendations.

3.3.6. The Installation Environmental Element will complete installation Emergency Planning and Community Right-to-Know Act (EPCRA) reporting requirements, using data from EESOH-MIS, as appropriate. (T-0). Follow DoD 4715.06 and AF EPCRA implementing guidance in [Chapter 7](#), along with additional procedures referenced in the non-directive HAZMAT management playbook published on the AF CE Portal.

CHAPTER 4

AIR QUALITY COMPLIANCE AND RESOURCE MANAGEMENT

4.1. General Requirements. The Air Quality Compliance and Resource Management Program identifies essential AF requirements and actions to manage AF air resource assets in order to maximize their military value and optimize their economic, ecologic, and community value, while attaining and maintaining compliance with 42 USC §§ 7401-7671q, CAA and applicable state and local air quality regulations. For overseas installations, air quality requirements are applied through country-specific FGS, or Overseas Environmental Baseline Guidance Document (OEBGD), per DoD 4715.05-G, where no FGS exist.

4.2. General Program Guidelines. This chapter establishes a framework for all Commands to use in complying with air quality requirements of 42 USC §§ 7401-7671q, CAA, or equivalent (for overseas), and AFPD 32-70. Types of installation actions which would impact air quality includes construction activities and installation of applicable equipment and industrial/utility controls. This would apply to such tenants as the Army and Air Force Exchange Service (AAFES), and other DoD services on AF installations or on joint installations where the AF is the lead component. Organizations, tenants, and services will maintain records to demonstrate compliance with Air Quality Program requirements to ensure the installation commander as the “Responsible Official” can certify compliance with 40 CFR **Part 70** operating permit requirements. **(T-0)**.

4.2.1. The Installation Environmental Element is assigned the responsibility of carrying out Air Quality compliance activities with direct operational oversight and support from the Force Civil Engineer Center, Environmental Directorate (AFCEC/CZ). At a minimum, the environmental element will ensure a program that includes assessing the applicability of the myriad of planning and compliance CAA regulations on AF activities; establishing robust recordkeeping, reporting, and monitoring processes; maintaining and actively using emissions inventories; and identification and documentation of trivial, de minimis, and otherwise insignificant or exempt sources. **(T-1)**. Successful execution of the air quality compliance and resource management program also requires cross-functional coordination and support from organizations outside of civil engineering.

4.2.2. Installation Organizations planning to purchase equipment that may generate air emissions will first coordinate with the Installation Environmental Element to ensure compliance with inventory requirements of 40 CFR **Part 51**, Subpart A. **(T-0)**. Operating new equipment with potential for air emissions can lead to potential permitting, authorization or registration requirements (e.g., degreasers, generators, boilers, painting or abrasive equipment).

4.2.3. Installation Tenant organizations (to include AAFES) and other DoD services on AF installations or on Joint Bases, where the AF is the lead component with command/control, will comply with applicable federal, state, local (consistent with 40 CFR **Parts 50-98**), or overseas air quality requirements. **(T-0)**. Any actions which affect air quality on the installation will be coordinated with the Installation Environmental Element. **(T-1)**. Air quality actions that would need to be coordinated include construction activities, installation of applicable equipment, or other air emission source information, to ensure appropriate segregation of Air Quality management activities of tenant organizations from the host’s emissions for Major source determinations.

4.2.3.1. These organizations, tenants, and services will maintain records to demonstrate compliance with these CAA Air Quality Program requirements. **(T-1)**.

4.2.3.2. Organizations, tenants, and services operating on overseas installations are not subject to the provisions of the CAA but comply with the country-specific FGS, or OEBGD where no FGS exists, and any obligations under a binding international agreement.

4.2.4. AF organizations that oversee government-owned, contractor-operated (GOCO) facilities shall ensure that the contracts include provisions that obligate the contractor to:

4.2.4.1. Manage an Air Quality Program to ensure compliance with all applicable federal, state, and local requirements (including permits), or for overseas installations, the appropriate FGS, or OEBGD where no FGS exists. **(T-0)**.

4.2.4.2. Meet all directed roles/responsibilities of this AFMAN applicable to installation commanders and the BCE, unless otherwise alleviated of responsibility by an official Memorandum of Agreement. **(T-1)**.

4.2.5. Installation Bioenvironmental Engineers will coordinate air quality data from Occupational and Environmental Health Program Process Assessments prescribed by AFI 48-145 with the Installation Environmental Element. **(T-3)**.

4.3. Air Quality Management System. The Air Quality program, as a part of the EMS framework ([Paragraph 1.4](#)), allows installations to appropriately plan, implement and operate, check, and review, as necessary, the management of air resources to ensure mission completion.

4.4. Air Quality Planning.

4.4.1. General Planning Guidelines (applicable to all installations, including overseas). It is critical that the Air Quality Program be proactively developed to ensure air quality assets necessary to support (and protect) the mission are available for all present and future operations. Planning is focused on maximizing the military value of air resources and optimizing their environmental, economic, ecological, and community value while assessing, attaining, and maintaining compliance with applicable air quality laws and regulations.

4.4.2. The following are key specific installation planning actions that must be carried out by the Installation Environmental Element:

4.4.2.1. As early as practicable, coordinate closely with all applicable organizations (e.g., MAJCOM, other civil engineer Flights, BE, logistics functions, federal, state and local regulatory authorities, metropolitan planning organizations) on plans for new construction, modification or replacement of emissions-related equipment, and on other requirements which will potentially impact the installations' air emissions and permit requirements. **(T-3)**.

4.4.2.2. Actively compare the installation Air Emissions Inventories (AEI) and upcoming changes in installation emission levels against regulatory thresholds and emerging regulatory requirements to assure uninterrupted mission capability and continued compliance, consistent with 40 CFR [Part 51](#), *Requirements for Preparation, Adoption, and Submittal of Implementation Plans* under the CAA. **(T-0)**.

4.4.2.3. Maintain an updated summary of all operating permit requirements in the Air Program Information Management System (APIMS) with a comparison to the regulatory

requirements and schedules. **(T-1)**. This comparison will help identify and document insignificant/exempt sources not subject to permitting program requirements.

4.4.2.4. Ensure expeditious planning to prepare installation compliance with newly promulgated standards as follows:

4.4.2.4.1. Track and assess new or emerging CAA regulatory requirements for their potential impact on installation operations. Ensure any such requirements are incorporated into appropriate program elements and report identified impacts to AFCEC/CZ through the appropriate chain of command. **(T-1)**.

4.4.2.4.2. Pre-plan to ensure requirements to meet newly promulgated standards are programmed and budgeted for within the length of the first program objective memorandum cycle following the effective date of the regulatory established compliance deadlines. **(T-1)**.

4.4.3. Emissions Control Technology (applicable to all installations under the regulatory oversight of the EPA). Installation project managers/proponents will cite applicable emission/control/performance standards for each project requiring specification or installation of equipment for control of regulated air pollutants to ensure that the proposed control technology meets air quality compliance requirements as required in the installation's CAA operating permit (Title V or Minor Source specific). **(T-0)**.

4.4.3.1. New major sources located in areas designated as attaining NAAQS require utilization of Best Available Control Technology (BACT). Maximum Achievable Control Technology Standards are technology-based air emission standards established to reduce emissions of Hazardous Air Pollutants (HAPs) at sources (facilities) designated as a major source of HAPs; the standards for smaller (area) sources of HAPs are called Generally Available Control Technology. Lowest Achievable Emission Rate (LAER) is required on new or modified major sources in nonattainment areas. Reasonably Available Control Technology (RACT) is required for existing sources in nonattainment areas, and in most cases, is less stringent than New Source Performance Standards or BACT.

4.4.4. Conformity Rule Planning (applicable to all installations under the regulatory oversight of the EPA). Installations or Project Proponents will ensure all Conformity Rule planning is accomplished on a timely basis in accordance with 42 USC §§ 7401-7671q, CAA and 40 CFR **Part 93**, Subpart B as follows:

4.4.4.1. The installation or AF project proponent (with assistance from AFCEC/CZ, ANG, and AFRC) shall complete a General Conformity applicability analysis per 40 CFR **Part 93.153(b)** and (c), *Conformity Applicability*, and a General Conformity determination per 40 CFR **Part 93.154**, *Federal agency conformity responsibility* (if applicable), before implementing any federal action in an air quality nonattainment or maintenance area. **(T-0)**. This ensures the action does not interfere with a state's plan to attain and maintain the National Ambient Air Quality Standards (known as State Implementation Plans).

4.4.4.2. The BCE will ensure all EIAP documents address applicable conformity requirements and the status of compliance in accordance with 32 CFR **Part 989**, 40 CFR **Part 93**, Subpart B. **(T-0)**.

- 4.4.4.2.1. In accordance with Section 176(c) of the CAA, federal agencies are required to assure that their actions conform to applicable State Implementation Plans for achieving and maintaining the National Ambient Air Quality Standards for criteria pollutants. Any action which negatively effects the goals of a State Implementation Plan is not allowed to proceed. Conformity applicability analyses and determinations are developed in parallel with EIAP documents, but are separate and distinct requirements and must be documented separately. **(T-1)**.
- 4.4.4.2.2. To increase the utility of a conformity determination in performing the EIAP, the conformity determination must be completed prior to the completion of the EIAP so as to allow incorporation of the information from the conformity determination into the EIAP decision process. **(T-1)**.
- 4.4.4.2.3. Proposed actions shall not proceed unless both EIAP and General Conformity processes are completed. **(T-1)**.
- 4.4.4.3. As an initial part of the planning process, the installation or AF proponent (with assistance from AFCEC/CZ, ANG, and AFRC) shall perform a General Conformity Applicability Analysis for AF actions as follows:
- 4.4.4.3.1. For Aircraft near-and far-field flight operations, installations will use the most recent and accurate site-specific data and information along with the most accurate calculation methodologies or estimating techniques generally accepted in the scientific community. **(T-0)**. Relevant data and information will include, but not be limited to: the mixing height used in the approved State Implementation Plan, the most recent relevant planning data that the General Conformity rule requires the action proponents to obtain from Metropolitan Planning Organizations or equivalent local agency, and the relevant mode of operations and time in mode for historical and proposed flight operations, if applicable; as profiles for the proposed Action. **(T-1)**. The AFCEC/CZ Air Quality SME and AFLOA/JACE will review calculation methodologies and/or estimating techniques for legal and technical sufficiency respectively. **(T-1)**. After consultation with AFLOA/JACE, SAF/GCN and SAF/IEE will accomplish final legal and policy validation. **(T-1)**.
- 4.4.4.3.2. For local projects or projects not related to aircraft, only use an approved (i.e. listed on an approved product list) Air Quality database/tool, along with best available local information and estimating techniques, if available. **(T-1)**. The Air Quality database/tool, calculation methodologies or estimating techniques will be reviewed for technical sufficiency by the AFCEC/CZ Air Quality SME, but final legal and policy validation for General Conformity Determinations will be accomplished at SAF/GCN. **(T-1)**.
- 4.4.4.4. If General Conformity is applicable, the proponent (with assistance from AFCEC/CZ, ANG, and AFRC) will perform and approve a conformity determination before the EIAP is completed. **(T-0)**.
- 4.4.4.5. Proponents shall prepare required conformity documents in coordination with the installation and AFCEC/CZ. **(T-0)**.
- 4.4.4.6. AFCEC/CZ will transmit draft Conformity Determinations to AF/A4C for higher headquarters coordination and SAF/IEE approval, prior to release for public review. **(T-1)**.

SAF/IEE is the lowest level of signature authority designated for a General Conformity Determination.

4.4.4.7. Conformity Rules (40 CFR **Part 93**, Subpart B, and any applicable state/tribal regulations promulgated per 40 CFR **Part 51**) apply only to federal actions in Non-attainment and Maintenance areas. AFCEC/CZ maintains an AF Air Quality EIAP Guide to help bases make appropriate determinations.

4.4.5. EIAP in Air Quality Planning (applicable to all installations). The National Environmental Policy Act (NEPA) requires the responsible federal official to consult with and obtain the comments of any federal agency that has jurisdiction by law or special expertise with respect to any environmental impact.

4.4.5.1. Proponents/installations/MAJCOMs will ensure all NEPA planning meets the requirements of Section 176(c) of the CAA, which requires Federal agencies to assure that their actions conform to applicable implementation plans for achieving and maintaining the National Ambient Air Quality Standards for criteria pollutants. **(T-0)**. Before implementing any federal action (regardless of the air quality attainment status) the proponent (with assistance from AFCEC/CZ) shall complete an Air Quality Impacts Analysis (AQIA) to review and disclose all of the ambient air impacts and any permit requirements involving any criteria pollutant emissions, and emissions of any other regulated pollutants under the CAA. **(T-0)**. The AQIA includes an initial screening of the net change in emissions using accurate site-specific data along with the most accurate calculation methodologies or estimating techniques and tools validated by the AFCEC/CZ Air Quality SME.

4.4.5.2. All NEPA/EIAP planning can be accomplished in accordance with the non-directive Air Quality EIAP issued by the AFCEC/CZ Air Quality SME to ensure best practices are followed.

4.4.5.3. AFI 32-1015, *Integrated Installation Planning*, details requirements for proponents/installations/MAJCOMs, in coordination with AFCEC/CZ and AFIMSC, to ensure all NEPA/EIAP planning is conducted in accordance with 32 CFR Part 187, *Environmental Effects Abroad of Major Department of Defense Actions*, 32 CFR **Part 989** and 40 CFR Parts 1500-1508.

4.4.5.4. General Conformity Rule: According to 32 CFR **Part 989**, all EIAP documents address the CAA Conformity Rule requirements. Proponents will ensure a General Conformity applicability analysis (See Section 4.6.4) and a General Conformity Determination (if applicable) are completed prior to the completion of the EIAP. **(T-0)**. This allows incorporation of the information into the EIAP to allow for the agency and public review. Where required, proponents complete conformity determinations simultaneously with EIAP decision documents.

4.4.6. Preconstruction New Source Review (applicable to all installations under the regulatory oversight of the EPA). In the early planning phase for any construction project (i.e., construction, renovation, or major equipment addition/modification), the proponent of proposed project shall consult with the Installation Environmental Element to ensure compliance with New Source Review regulations contained in 40 CFR **Parts 51** and **40 CFR Part 52**, *Approval and Promulgation of Implementation Plans*, including determination of

appropriate permits needed. **(T-0)**. The Environmental Element evaluates the proposed project based on the Potential-to-Emit (PTE) in accordance with the applicable local, state, and/or federal rules that make up the appropriate nonattainment New Source Review or Prevention of Significant Deterioration (PSD) program under the regulations provided above.

4.4.6.1. There are three types of permits that can be issued under New Source Review for either new or modified sources:

4.4.6.1.1. PSD permits apply to new major sources or major modifications at existing sources in areas designated attainment or unclassifiable for a particular National Ambient Air Quality Standards (see local, state, and/or federal program rules promulgated under 40 CFR **Parts 51-52**). For specific source categories a new major source has a PTE of 100 tons per year or more, otherwise the threshold is set at 250 tons per year. Thresholds for modifications at existing major sources vary according to the regulated pollutant. For example, the significance threshold for Ozone depleting substances at existing major sources is zero, while the significance threshold for Nitrogen Oxides (NOx) is 40 tons/year. Application of Best Achievable Control Technology is required to control emissions.

4.4.6.1.2. Nonattainment New Source Review Permits apply to new major sources or major modifications to existing sources in areas designated nonattainment or maintenance for the National Ambient Air Quality Standards as well as in attainment areas within an Ozone Transport Region (See local, state, and/or federal program rules promulgated under 40 CFR **Parts 51-52**). Thresholds for new major sources and major modifications vary from 10 tons/year to 100 tons/year, depending on the area's classification or severity of nonattainment. Application of the Lowest Achievable Emission Rate technology is required to control emissions.

4.4.6.1.3. Minor New Source Review Permits apply to stationary sources that do not require PSD or Nonattainment New Source Review permits. They may contain enforceable conditions that limit emissions or operating conditions in order to create "synthetic minor" sources that are not subject to PSD or nonattainment New Source Review requirements.

4.4.6.2. Process owners responsible for projects which will create new major stationary sources of air pollution or process owners making any major modifications to existing major stationary sources need to ensure air permits are obtained in accordance with 40 CFR **Part 51**, Subpart I, *Review of New Sources and Modifications*, before commencing construction activities. **(T-0)**.

4.4.7. Utilizing Air Emission Reduction Credits in Planning (applicable to all installations under the regulatory oversight of the EPA). Installations, with assistance from AFCEC/CZ, can pursue EPA and/or state economic incentive programs to control/reduce air emissions by acquiring Emission Reduction Credits whenever possible. The Installation Environmental Element shall report Emission Reduction Credits received to AFCEC/CZ for tracking. **(T-1)**. More detailed information on AF generation, use and disposition of Emission Reduction Credits is summarized in **Attachment 3** with more details provided in the "Air Quality EIAP Guide" maintained by AFCEC/CZ.

4.4.8. Planning for Military-Unique Sources (applicable to all installations, including overseas). The Installation Environmental Element will report any new military-unique sources encountered to AFCEC/CZ for evaluation and to obtain specific guidance. **(T-1)**. Where military-unique sources exist, AFCEC/CZ can assist with obtaining the most recent information on EPA, DoD, and AF policy and/or guidelines regarding air resource management strategies for these sources.

4.4.9. Risk Management Planning (applicable to all installations under the regulatory oversight of the EPA). The Installation Environmental Element will develop a Risk Management Plan for stationary sources that exceed the threshold quantity of regulated substances in accordance with 40 CFR **Part 68**, *Chemical Accident Prevention Provisions* or applicable state law. **(T-0)**. Additionally, all Risk Management Plans must be revised and resubmitted to the appropriate regulatory authority every five years. **(T-0)**. The Installation Environmental Element, in consultation with the base Safety office, will also evaluate, and if applicable, plan for, prevent, and minimize the consequences of any accidental releases of extremely hazardous chemicals under the “general duty clause” of 42 USC §§ 7401-7671q, CAA. **(T-0)**.

4.4.10. Air Episode Planning (applicable to all installations under the regulatory oversight of the EPA). Where required under 40 CFR **Part 51**, Subpart H, *Prevention of Air Pollution Emergency Episodes*, the Installation Environmental Element must develop and implement a contingency plan for air pollution emergency episodes which identifies all actions that can reasonably be taken without compromising essential services and mission responsibilities. **(T-0)**.

4.4.11. Emergency Planning (applicable to all installations, including overseas). Follow AFI 10-2501, *Air Force Emergency Management Program*, and AFMAN 10-2502, *Air Force Incident Management System Standards and Procedures*, for emergency planning and response to major accidents; natural disasters; terrorist use of weapons of mass destruction; and nuclear, biological, chemical, and conventional warfare; and for development of oil and hazardous material releases procedures in Installation Emergency Management Plans.

4.5. Air Quality Compliance - Implementation and Operation.

4.5.1. Air Emissions Inventory (AEI). The Installation Environmental Element must prepare and periodically update an AEI, using APIMS, for all installation stationary air emission sources in accordance with applicable state or local requirements promulgated per 40 CFR **Part 51**, Subpart A and current AF AEI guidance from AFCEC/CZ. **(T-0)**.

4.5.1.1. Regulatory-required stationary AEIs are completed at the frequency specified by federal, state and local regulations.

4.5.1.2. Comprehensive stationary AEIs (applicable to all installations, including overseas) include all emissions sources (i.e., both permitted and non-permitted sources). The Installation Environmental Element will annually review/validate APIMS to ensure currency of the AEI (i.e., sources and consumption data is representative of the current base conditions). **(T-1)**. A comprehensive review of all sources and associated consumption data for the AEI will be conducted at least every three years (five years for overseas and remotely located facilities) to accurately reflect current emissions. **(T-1)**.

4.5.1.3. Stationary source AEIs include all criteria pollutants, Hazardous Air Pollutants, and greenhouse gases and reflect the installation's current actual and PTE emissions. Annual regulatory emissions reports, a subset of the comprehensive AEI, are provided to federal, state and local (including Metropolitan Planning Organization or other regional) regulatory agencies as required. Greenhouse gas reporting mandated by E.O. 13834, is accomplished by SAF/IEE in conjunction with the Annual Energy Management and Resilience reporting process.

4.5.1.4. For installations that exceed the greenhouse gas reporting threshold, the Installation Environmental Element shall accomplish greenhouse gas reporting mandated by 40 CFR **Part 98**. (T-0). Recommend other installations within 10% of the greenhouse gas reporting threshold accomplish greenhouse gas estimates in accordance with the non-directive *Guide to the Mandatory Greenhouse Gas Reporting Rule and Greenhouse Gas Tailoring Rule*, issued by AFCEC/CZ. Results will be reported to AFCEC/CZ via APIMS. (T-1). Greenhouse gas reporting mandated by E.O. 13834 is accomplished by SAF/IEE in conjunction with the Annual Energy Management and Resilience reporting processes.

4.5.2. Title V and State Operating Permits (applicable to all installations under the regulatory oversight of the EPA, state, or local air pollution control authorities). For facilities formally designated as a major source, the Installation Environmental Element will obtain a Title V Operating Permit under 40 CFR **Part 70** as implemented by state and local regulations. (T-0). The Installation Environmental Element will obtain the appropriate minor source operating permit for facilities not designated as a major source. (T-0).

4.5.2.1. The facility's PTE shall be updated each time that a comprehensive stationary AEI is completed. (T-3).

4.5.2.2. Each time a facility's PTE is reestablished, the Installation Environmental Element must make a major source determination by comparing the facility's PTE against the applicable criteria pollutant and/or Hazardous Air Pollutant major source thresholds under 40 CFR **Parts 70** and **40 CFR Part 71**. (T-0).

4.5.2.3. If the determination concludes the facility's PTE is equal to or greater than the applicable criteria pollutant and/or Hazardous Air Pollutant thresholds, the Installation Environmental Element will consult with AFCEC/CZ (or ANG and AFRC for Guard and Reserve units respectively) for review and validation of the determination. (T-1). Unless exempted by the permitting authority, the PTE determination is performed in accordance with the US EPA's guidance memorandum, *Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act*, published 2 August 96. (T-0). The Installation Environmental Element can refer to the PTE guidance included in AFCEC/CZ's overall AEI guidance.

4.5.2.4. The Installation Environmental Element must file an application within one year, or a shorter period if required by the regulating agency, in accordance with 40 CFR **Part 70** or **40 CFR Part 71**. (T-0). If an installation can go below major source emission thresholds by accepting self-imposed federally enforceable limits on PTE without negatively impacting the mission, the installation can then weigh the pros and cons of applying for, or being under, a synthetic minor permit instead of a Title V operating permit.

Facilities will need to ensure that inventories are current in order to maintain non-Title V permit status.

4.5.2.5. Installations shall forward any major source or synthetic minor determination to AFCEC/CZ for final review/validation (Guard and Reserve units forward through the ANGRC and AFR Command respectively). **(T-1)**. Upon final validation by AFCEC/CZ, installations (with AFCEC/CZ assistance), or the ANGRC and AFRC for Guard and Reserve units respectively, are responsible for obtaining the appropriate permits.

4.5.3. Mobile Sources (applicable to all installations, including overseas). The Installation Environmental Element, in concert with the installation vehicle maintenance shop (A4 Logistics Readiness), shall ensure that motorized AF vehicles and portable equipment are operated, refueled, and maintained in accordance with all applicable federal, state and local requirements under 40 CFR **Part 85**, *Control of Air Pollution from Mobile Sources*. **(T-0)**.

4.5.3.1. Vehicle Inspection and Maintenance (I&M). Applicable to all installations located in areas where the EPA has approved a State Implementation Plan requiring a Vehicle I&M Program. Installations shall ensure that all AF fleet vehicles and privately owned vehicles operated on the installation comply with non-discriminatory motor Vehicle I&M program that applies under §118 of the CAA. **(T-0)**.

4.5.3.1.1. Generally, the base program is adopted within 90-days of the effective date of the Vehicle I&M program. Under the program, Federal employees operating employee-owned vehicles on the installation must self-certify (regardless of where the employee's vehicle is registered) their compliance status with the local area Vehicle I&M requirements using the Employee-Vehicle Certification and Reporting System (ECARS). **(T-1)**.

4.5.3.1.2. For all AF facilities located in an area with an applicable Vehicle I&M program, commanders are required under 42 USC § 7418(d), *Vehicles Operated on Federal Installations*, to ensure that employees provide proof of compliance with the local (or an equivalent) Vehicle I&M program for vehicles operated on the affected facility. **(T-0)**.

4.5.3.1.3. All employees assigned to the affected facility for more than 60 days shall certify compliance (and periodically recertify compliance) by digitally signing the AF Form 4434, *Vehicle Inspection and Maintenance (I/M) Program Self Certification*, available in the ECARS module of the Air Program Information Management System (APIMS). **(T-1)**. The AF Form 4434 is maintained on the ECARS server while the employee is assigned to the installation, or for the duration of the registration period, whichever is shorter. Hard copy of the AF Form 4434 may be used in lieu of the electronic ECARS generated form in situations where government employees are not identified in the AF Personnel System, such as non-AF employees on an AF hosted installation.

4.5.3.1.4. All employee-vehicle operators shall maintain documentation of compliance with the applicable Vehicle I&M program requirements while operating their vehicle on the affected facility, and supply such documentation as required by the facility. **(T-1)**.

4.5.3.2. Clean Fuel and Vapor Recovery (wherever applicable). AF vehicles and equipment operated in areas subject to EPA or other applicable State programs requiring reformulated, oxygenated, ultra-low sulfur or other clean fuel programs and/or Stage II vapor recovery systems must ensure that compliant fuels and equipment are used during vehicle refueling operations, and that fuel dispensing equipment are labeled, in accordance with the requirements of 40 CFR **Part 80**, *Regulation of Fuels and Fuel Additives*. **(T-0)**.

4.6. Air Quality Self-Assessment and Corrective Action

4.6.1. General Program Guidelines (applicable to all installations, including overseas). The effectiveness of the Air Quality Program is measured by the latest metrics established by the Office of the Deputy Assistant Secretary of Defense (Environment). The air quality metric tracks permit compliance as part of the recurring AFCEC/CZ environmental data call in preparation for the annual DoD Environmental Management Review.

4.6.2. AF Inspection System. Use the Environmental Inspection Process, in accordance with AFI 32-7001, as a tool for assessing and monitoring AF compliance, and identifying and prioritizing recommended corrective actions as necessary.

4.6.3. Data Management. The AF-approved information system for air quality is APIMS, which provides a standardized, integrated tool and methodology to track, manage, and report all data related to the Air Quality Program.

4.6.3.1. The Installation Environmental Element will ensure that the following air quality compliance and resource management data are accurately maintained in APIMS: AEI, Potentials-to-Emit (PTE), operating permits, permit compliance assessments, refrigerant management records, and ECARS self-certifications, including decomposition of permit requirements and associated checklists and facility power module. **(T-1)**.

4.6.3.2. AFCEC/CZ assists installations in the collection, quality assurance, and analysis of data and tracks, assesses, and communicates new or emerging regulatory requirements for potential impact on installation operations and new reporting.

4.6.3.3. The Installation Environmental Element, in accordance with AFI 32-7001, ensures the collection, maintenance, and tracking of base-level air quality data needed to compile established performance measures to report to HAF and for the annual Defense Environmental Program Annual Report to Congress.

4.6.4. Payment of Clean Air Act (CAA) Fines and Penalties (applicable only to installations under the regulatory oversight of the EPA). Except for a limited number of jurisdictions where payment of state or local punitive CAA penalties are required as a matter of law, the authority to pay such penalties involves a policy decision that has not been delegated below SAF/IEE. The Installation SJA, after coordinating with MAJCOM (or ANG and AFRC in the case of Guard and Reserve installations) and appropriate AFLOA/JACE Regional Counsel Office, and gaining authority from AFLOA/JACE and SAF/IEE as applicable, will authorize installation personnel to commence any negotiations with state or local regulators concerning a CAA enforcement action or other CAA compliance matter. **(T-1)**. The installation JA will remain informed or involved in all significant aspects of the negotiations and continue to coordinate with MAJCOM and appropriate AFLOA/JACE Regional Counsel Office. **(T-1)**. AFI 32-7001 provides additional guidance on the settlement of Enforcement Actions or local cases, and/or payment of fines or penalties.

4.6.5. Training and Education. Based on AF-wide tracking and trend analysis, AFCEC/CZ shall pursue effective, but economical, air quality compliance and resource management education and training opportunities to include non-traditional classroom education and alternative training methodologies (e.g., correspondence and webinar training). (T-1). At a minimum, AFCEC/CZ will include the following specific critical air quality topics to be developed and maintained:

4.6.5.1. AEI and PTE training, to include the use of the APIMS and estimating procedures for stationary and all other sources of air emissions. Training addresses typical mandatory state or local requirements promulgated per 40 CFR **Part 51**, Subpart A.

4.6.5.2. Air Quality EIAP training, to include the EIAP, National Environmental Policy Act, and General Conformity Rule. Training addresses mandatory requirements under 32 CFR **Part 989**; 40 CFR Parts 1500-1508; 40 CFR **Part 51**, Subpart W; 40 CFR **Part 93**, *Determining Conformity of Federal Actions to State or Federal Implementation Plans*; and/or local or state regulations.

4.6.5.3. Greenhouse gas Mandatory Reporting training, which addresses mandatory requirements under 40 CFR **Part 98**.

4.6.5.4. Any other air quality topic, as identified by the AFCEC/CZ Air Quality SME, necessary to ensure compliance with all federal, state, and local regulatory requirements.

4.6.6. Base Attainment Status (applicable only to installations under the regulatory oversight of the EPA). An authoritative attainment status list is kept updated by AFCEC/CZ to correct erroneous attainment status listings in the EPA's "Green Book" which is typically not regularly maintained or updated.

4.6.6.1. The Installation Environmental Element can use the authoritative list for permitting and General Conformity assessment.

4.6.6.2. The authoritative list is available as a best management practice on AFCEC's SharePoint® site, "eDASH" Air Quality page.

4.7. Air Quality Management Review

4.7.1. Regulatory Agency Noncompliance Actions. AFCEC/CZ and Installation Environmental Element will review management action plans that ensure outstanding open CAA Enforcement Actions are resolved within the required time frames. (T-1). Additionally, AFCEC/CZ, working with the base environmental function, will review the response to regulatory agency inspection findings to ensure timely corrective actions and reporting timelines. (T-1).

4.7.2. Environment, Safety and Occupational Health Council (ESOHC). Installation ESOHCs are the appropriate forum for coordinating Air Quality Program corrective actions which require cross-functional review, deliberation, and approval. The ESOHC can also set or ensure program goals that are appropriate and produce actions to fully support current and future mission requirements with adequate Air Quality resources/assets. See AFI 90-801, *Environment, Safety, and Occupational Health Council*, for further information.

4.8. Air Quality Records Management. APIMS, the AF-approved information system for Air Quality compliance, provides a standardized and integrated tool and methodology for tracking air

quality records and reporting air quality data. The Installation Environmental Element will ensure the following:

4.8.1. Air quality compliance and resource management data are accurately maintained in the modules of APIMS (e.g., AEI, Refrigerant Compliance, Compliance Assessment, and Facility Power) in a timely manner. **(T-1)**. This includes data related to installation air emissions, PTE, operating permits, results of permit-driven compliance assessments, refrigerant management records, and other pertinent air resource management information, to ensure full mission support through effective management of natural infrastructure assets.

4.8.2. ECARS collects the minimum personal information required to document employee compliance on AF Form 4434 in accordance with the Privacy Act Statement (notice issued by the EPA on 1 Oct 2001 at 66 Fed. Reg. 49955), prepares automated reports on employee compliance, and archives the digitally signed employee certification forms on a secure server. **(T-1)**.

CHAPTER 5

HAZARDOUS WASTE (HW) MANAGEMENT

5.1. General Requirements.

5.1.1. 42 USC §§ 6901-6992, *RCRA* applies to waste management, both solid and HW. HW is a substance first determined to be a SW, as defined in 40 CFR Part 261, and that has not been excluded from the EPA solid or HW regulations; and is either a characteristic HW (i.e., ignitable, corrosive, reactive, or toxic) in accordance with 40 CFR Part 261, Subpart C, *Characteristics of Hazardous Waste*; or a listed HW (listed on the F, K, P, or U lists at 40 CFR, Parts 261.31-33, Non-Specific Sources, Specific Sources, and Commercial Chemical Products, respectively). It may include a substance identified as a HW by authorized U.S. State or overseas Country-specific Final Governing Standard, or the current Overseas Environmental Baseline Guidance Document (OEBGD) if no Final Governing Standard (FGS) exists. Consult with the installation environmental function or base legal office for advice in this situation. AF installations have to comply with all applicable HW standards and regulations. The BCE is the installation commander's point of contact responsible for ensuring that SW and HW management installation processes and support services are in compliance with applicable DoD, federal, state, interstate, and local environmental requirements. **Note:** Bases have an Installation Environmental Element, under the BCE (CEIE), or Environmental Management function at ANG and AFRC installations, that performs and implements the necessary environmental functions. For the purposes of this chapter any reference to the Installation Environmental Element or CEIE for RegAF installations will also apply to the ANG or AFRC installation EM function unless superseded by ANGRC or AFRC specific policy/guidance.

5.1.2. Installation units generating waste will apply appropriate regulatory waste determinations as required in 40 CFR Part 262, Subpart A: *General, Hazardous Waste Determination and Recordkeeping*, in assigning and applying the correct waste management strategies for the following categories: exempt from SW; exempt from HW; manage under special 40 CFR **Part 266** provisions; and manage as universal waste. **(T-0)**. There are many exceptions to waste being considered RCRA HW, with Household Waste being one such category. Consult with the installation HW manager (in CEIE for RegAF) to ensure the proper determination.

5.1.3. The AF endeavors to follow EPA's pollution prevention methodology as depicted in the pollution prevention hierarchy shown in **Table 5.1** Installations will have a HW minimization program to reduce the volume and toxicity of waste generated in accordance with 42 USC § 6922(b), *Standards Applicable to Generators of Hazardous Waste, Waste Minimization*. **(T-3)**. The establishment of the HMMP is the AF method, per **Chapter 3** of this manual, which installations can use to document compliance with this requirement. This is done first through source reduction, such as chemical substitution, process change, or other techniques to reduce generation of hazardous material. Where environmentally damaging materials are used, their use is minimized. If the use of such materials cannot be avoided, the spent material or waste is reused or recycled whenever feasible. As a last resort, spent material or waste that cannot be reused or recycled is disposed of in an environmentally safe manner, consistent with the requirements of all applicable laws, including 42 USC §§ 6901-6992, *RCRA*.

5.1.4. Installation commanders must ensure that installations with operations that generate HW must have a HW management program in accordance with DoDI 4715.06 and AFPD 32-70, to ensure compliance with this manual, and all applicable federal, state, and local laws and regulations; and, for overseas bases, the OEBGD or FGS. **(T-0)**. The Installation Environmental Element will ensure the program is documented in a HW management plan. **(T-1)**.

5.1.5. Installations and Geographically Separated Units (GSUs) that qualify as Very Small Quantity Generators under RCRA (40 CFR Part 262, Subpart A), do not have to meet the AF-specific requirements of this Chapter as long as they meet the minimum RCRA requirements allowed under the state’s implementation of the RCRA Generator rules. Regardless of generator status, installations must still consider requirements described in **Paragraphs 5.3** and **5.6.4 (T-0)**.

Table 5.1. Pollution Prevention Methodology.

	In establishing Action Plans for aspects that generate pollutants, CFTs should evaluate proposed targets or objectives against the following P2 hierarchy of preferred approaches	Action Plans at each level of P2 preference are linked to these traditional DoD/USAF environmental programs
MORE PREFERRED >>	Elimination of an aspect's impacts through a change in policy or procedures; the reengineering of a system, facility, activity, or process; or the implementation of an environmentally benign substitute material	Traditional Facility or Weapon System (WS) P2 Projects, GPP, HMMP (authorization product substitution process), Compliance through P2 (CTP2)
	Reduction in the significance of an aspect's impacts through a change in policy or procedures; the reengineering of a system, facility, activity, or process; or the implementation of an environmentally preferred substitute material	Traditional Facility or WS P2 Projects, GPP, HMMP (authorization product substitution process), CTP2
	Reduction in the significance of an aspect's impacts through on-site recycling and re-use	Traditional Facility or WS P2 Projects, CTP2, Recycling program
<< LESS PREFERRED	Reduction in the significance of an aspect's impacts through return to off-site recycling and/or off-site reuse	Recycling program, solid waste management, disposal programs
	Reduction in the significance of an aspect's impacts through the implementation of operational controls	Integrated solid waste management, HMMP (authorization, minimization, and tracking), hazardous waste reduction and disposal, pollution control technologies, PPL, permitting
	No reduction in significance; the aspect continues to generate impacts; unmitigated; targets and objectives associated with the aspect are focused on maintaining mere compliance.	Compliance, permitting, surveillance, ESD/CAMP

5.2. Hazardous Waste Management Plan (HWMP).

5.2.1. The Installation Environmental Element will, with AFCEC/CZ support, develop a HWMP using the standardized AFCEC template, but modified to reflect site-specific regulatory requirements, installation HW activities, and to meet applicable state or local requirements. **(T-1)**. In the case of the ANG, installation Environmental Management offices will work with ANGRC (NGB/A4AN).

5.2.2. The Installation Commander will approve the HWMP and ensure installation compliance. **(T-1)**. The approval can be via signature or as documented in appropriate

Environmental, Safety, and Occupational Health Council (ESOHC) minutes. The Environmental Management System (EMS) Cross-Functional Team (CFT) will review the HWMP at least annually with administrative changes annotated in the plan without the need for Installation Commander or ESOHC approval. **(T-3)**. Substantive revisions require coordination and approval by the Installation Commander as determined by the local EMS CFT and/or in accordance with host installation procedures.

5.2.3. The HWMP contains, at a minimum, a HW stream inventory, Waste Analysis Plan (WAP), HW management procedures (addressing characterization, turn-in and disposal procedures, disposal contracts, inspections, munitions, mixed waste, permits, recordkeeping, and host-tenant agreements as warranted), reporting procedures, training plan, and a reference to the installation emergency preparedness and spill prevention (or equivalent) plan (in accordance with AFI 10-2501), to include the HW contingency plan. References to other applicable plans are only included in the HWMP when independently prepared.

5.3. Waste Characterization and Identification.

5.3.1. The HW Generating Activity will coordinate waste generation with the BCE or ANG installation environmental function to ensure that waste streams are properly characterized in accordance with 40 CFR Part 261, applicable DoD, state, and local regulations, and FGS, or OEBGD requirements. **(T-0)**.

5.3.2. The WAP includes HW streams and sets forth procedures, including specific sampling methods, necessary to ensure proper HW management.

5.3.3. The Installation Environmental Element will ensure the development/update of a HW Stream Inventory describing all HW streams generated. **(T-1)**. HW Management Plans include a HW stream inventory and waste profiles, and lists at least the Generating Activity's identity and location, waste stream number, and the waste characteristics (e.g., EPA waste code, and state waste code). The Enterprise Environmental, Safety and Occupational Health-Management Information System (EESOH-MIS) will be the authoritative database used to document the list of HW sites and corresponding streams and waste profiles. **(T-1)**.

5.3.4. The Installation Environmental Element will document the waste stream description in EESOH-MIS in order to generate the Defense Logistics Agency (DLA) Form 2511, *Hazardous Waste Profile Sheet* (or electronic equivalent). **(T-0)**.

5.3.5. Universal Waste (UW). Federally designated UW include batteries, pesticides, mercury-containing equipment, and lamps that are HW. These items are managed in accordance with the UW regulations of the appropriate regulatory agency. Universal Waste can be state specific. It is recommended Installation Environmental Element check with the state regulatory agency to determine what else is considered Universal Waste in that state.

5.3.6. Mixed Waste (MW). Mixed Waste consists of waste containing both HW and radioactive material.

5.3.6.1. Installations that generate MW must comply with 40 CFR Parts 260-262, 42 USC §§ 2011-2297, *Development and Control of Atomic Energy*, state and AF disposal requirements. **(T-0)**. The Installation Environmental Element will advise on 42 USC §§ 6901-6992, *RCRA* requirements as applicable to storage/handling of MW. **(T-1)**. MW can be generated during nuclear weapons maintenance activities governed under 42 USC §§

2011-2297(also known as “Section 91b”). The AF Safety Center provides 91b policy under AFI 91-108, *Air Force Nuclear Weapons Intrinsic Radiation and 91B Radioactive Material Safety Program*. Consult AFI 91-108 for nuclear weapons-related MW disposal requirements. Consult AFMAN 40-201 for Radioactive Waste (RW) and MW disposal requirements (40 CFR **Part 266**, Subpart N, *Conditional Exemption for Low-Level Mixed Waste Storage, Treatment, Transportation and Disposal*) not related to nuclear weapons maintenance.

5.3.6.2. The Installation Environmental Element will coordinate the disposal of RW and MW with the Installation Radiation Safety Officer, who will in turn, coordinate with the Air Force Radioactive Recycling and Disposal (AFRRAD) office, 88 ABW/CE, Wright-Patterson AFB, OH. **(T-1)**. The AFRRAD office responsibilities are outlined in AFMAN 40-201, and will act as the sole agent for disposal of AF MW and RW. **(T-1)**.

5.3.7. Military Munitions. All conventional explosive ordnance, whether it remains useable/serviceable or has been designated as unserviceable, is managed in accordance with AFMAN 21-201, DoDM 6055.09 and the DoDM 4715.26, *Military Munitions Rule Implementation Procedures*, to implement the EPA’s RCRA Military Munitions Rule.

5.3.7.1. Installation Munitions storage activities will ensure military munitions determined to be SW or HW for regulatory purposes, are handled, stored and disposed of in accordance with AFMAN 21-201, DoD policy, applicable state and federal regulations, and the RCRA Military Munitions Rule found at 40 CFR Part 264, *Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities*, 40 CFR Part 265, *Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities*, and 40 CFR **Part 266**, Subpart M, as appropriate. **(T-0)**. This includes material potentially presenting an explosive hazard.

5.3.7.2. The DoD Military Munitions Rule (MR). The DoD MR was used to amend RCRA regulations requiring Waste Military Munitions to be managed as a HW. The Munitions Rule is a federal standard. Each state may either adopt the Munitions Rule or choose to enact a state Munitions Rule regulation that is more stringent than the Federal regulation. Therefore, each installation, led by the base civil engineering environmental function, and in coordination with its servicing legal office, must interact closely with the service appointed DoD Regional Environmental Coordinator to determine and understand the extent of state (or territory) adoption of the MR and DoD Munitions Rule implementation procedures. **(T-1)**. In accordance with the DoD MR, military munitions in the active inventory or war reserve stocks, and assigned an appropriate condition code for a valid military purpose, are not considered waste because these have not been discarded, abandoned or otherwise disposed of.

5.3.7.3. Range operators, in consultation with the BCE, will establish and implement procedures to assess and manage the environmental impacts of using MR as required by DoDI 4715.14. **(T-0)**.

5.3.8. HW Pharmaceuticals. Medical Facilities on AF installations will work with Reverse Distributors to identify potentially creditable and non-creditable waste pharmaceuticals to ensure compliance with EPA’s final rule (84 Federal Register 5816). **(T-0)**. Medical Facilities located on AF installations will manage all non-creditable pharmaceutical waste as a HW under the requirements of 40 CFR **Part 266**, Subpart N: *Hazardous Waste Pharmaceuticals*. **(T-0)**.

This conservative management approach is protective of the environment and simplifies implementation of the HW Pharmaceutical regulations. Disposal cost for all non-creditable pharmaceuticals is the responsibility of the Defense Health Program.

5.3.9. Spent Blast Media (SBM). AF installations may be regularly purchasing or leasing blast media to prepare weapon systems or equipment for painting and repair. Regardless of method of procurement of blast media or the procurement source, in accordance with DoD Policy Memorandum on *SBM Management Policy*, 10 July 2019, all SBM generated after use of blast material will initially be sampled to make a HW determination using the appropriate test method (e.g. Toxic Characteristic Leaching Procedure) and checking for listed HW. **(T-0)**. If tests indicate HW, per the DoD policy, installations will not claim a hazardous secondary material exclusion available under the Resource Conservation and Recovery Act (RCRA) and send for recycling, but handle and dispose as a HW in accordance with Civil Engineering procedures and base HW Management Plan. **(T-0)**. SBM determined to be non-HW can continue to be recycled, but installations must follow-up with recyclers to ensure proper handling of spent media is accomplished in accordance with applicable law and regulations. **(T-3)**. For SBM generated outside the United States, the DoD policy memo states that the same process of sampling/testing for HW will be applied and SBM disposed in accordance with International agreements and host-country FGS, or the latest DoD 4715.05-G, OEBGD. **(T-0)**.

5.4. Disposal Contracts.

5.4.1. Installations will use DLA Disposition services as the DoD HW disposal agent for routinely generated HW or HW from base operations not connected to a specific contract, in accordance with DoDM 4160.21, unless there is a compelling reason to use alternative contract disposal or per the exemptions listed in **Paragraph 5.4.1.1**. **(T-0)**. Installations may contract for HW disposal, but must provide appropriate justification and seek approval from AFCEC/CZ for RegAF installations, ANGRC (NGB/A4AN) for ANG installations, and AFRC/A4CA for AFR installations. **(T-1)**.

5.4.1.1. Installation proponents of construction/demolition, renovation, cleanup, or other local contracts, will include proper waste handling, labeling and disposal as part of the contract requirements. **(T-1)**. HW generated from contracted cleanup or remediation projects or construction or demolition and renovation contracts does not have to be disposed through the DLA Disposition Services. Disposal through DLA Disposition Services should only be accomplished with advance coordination. HW being considered for recycling is mandated to meet requirements set forth in 40 CFR Part 261.6, *Requirements for Recyclable Materials*. Hazardous material being recycled or reclaimed in accordance with 40 CFR Part 261, is not considered disposal. If hazardous material has been abandoned or discarded, the fact that recycling is occurring does not prevent the need to characterize the material leaving the base.

5.4.1.1.1. In reaching a disposal or discard determination, installation owners of recycling contracts will ensure the table in 40 CFR Part 261.2(c), *Definition of Solid Waste* is carefully considered and material classified as SW or potential HW. **(T-0)**.

5.4.1.1.2. For locally procured waste recycling, ensure consistency with EPA's Pollution Prevention hierarchy (See **Paragraph 5.1** for locally procured contracts under the control of installation contracting) and compliance with appropriate

- requirements of this section. **(T-1)**. Installations must ensure legitimate recycling and compliant recycling facilities are being used. **(T-1)**.
- 5.4.1.2. All local contracts are performance-based in accordance with AFI 63-138, *Acquisition of Services*. Consult the servicing contracting office for assistance. **Note:** AFI 63-138 does not apply to the ANG. Consult with the Operational Contracting Squadron on best approach.
- 5.4.1.3. The base will ensure that locally sourced installation contracts for HW disposal, as allowed by (**Paragraph 5.4 and sub-Paragraphs**), does not conflict with provisions of an existing DLA Disposition Services contract or result in breach of a DLA Disposition Services contract. **(T-0)**.
- 5.4.1.4. The base will ensure, once approved by AFCEC/CZ (or AFRC or ANGRC), all local contract development is coordinated with the Contracting Officer, SJA, and installation environmental function. **(T-1)**.
- 5.4.1.4.1. The SJA and the installation environmental manager review these documents before sending them to the Contracting Officer to ensure that the documents follow applicable DoD, federal, state, and local regulations and requirements.
- 5.4.1.4.2. The Contracting Officer, in consultation with the SJA, determines if the contractor must maintain insurance to cover liabilities associated with improper HW transportation, treatment, or disposal. At a minimum, contracts must require indemnification of the government by the contractor. **(T-1)**.
- 5.4.1.5. The base evaluation team must evaluate all offerors' compliance records when selecting a source for HW transport and disposal services. **(T-1)**.

5.5. Host-Tenant Support.

- 5.5.1. The host AF installation will support the HW disposal needs of both AF and DoD tenants on AF installations. **(T-1)**.
- 5.5.2. For intra-service support (including AF, AFRC, and ANG), host AF installations will plan for their tenants' HW disposal needs, unless **Paragraph 5.5.4** applies. **(T-1)**.
- 5.5.3. Tenants must follow all laws and regulations applicable to the installation and procedures outlined in the installation HW management plan (HWMP). **(T-0)**. Tenants submit reports required by the HWMP and in accordance with the Host Tenant Agreement.
- 5.5.3.1. When tenants do not comply with HW laws, the installation commander may take any action needed to require tenants (and their contractors) to comply, with no charge to the host-installation.
- 5.5.3.2. Tenants responsible for HW management facilities, which require permitting, must coordinate with the host-installation. **(T-1)**. The tenant signs as operator/generator and the installation commander signs as facility owner.
- 5.5.4. Tenants and other organizations not funded with AF O&M funds will pay directly for waste disposal costs as documented in a host-tenant agreement. **(T-1)**. Obtain an appropriate DoD Activity Address Code for use in billing to directly reimburse the DLA in accordance with AFMAN 65-605, Volume 1, *Budget Guidance and Technical Procedures*.

5.5.5. If a tenant function is contracted out, this section still applies as the contracted-tenant function would still be considered a tenant function under AF policy. The tenant organization still has oversight for that contract function. However, this section does not apply to host-contracted functions, which would be subject to other appropriate sections in this AFMAN.

5.6. Hazardous Waste (HW) Implementation and Operation.

5.6.1. Training.

5.6.1.1. All personnel, whose work involves HW, and their immediate supervisors must receive and successfully complete HW training appropriate to their job responsibilities as required of small and large quantity generators by 40 CFR Part 262, Subpart A. **(T-0)**. Training occurs within six months of an employee's arrival or assignment to HW-related duties. Until a new employee has received the appropriate HW training, the employee is permitted to only handle HW under the supervision of a HW trained individual as required by 40 CFR Part 262, Subpart A. **(T-0)**. Until the employee has received the appropriate HW training, the employee only handles HW under the supervision of a HW trained individual. Supervisors and workers must also successfully complete annual refresher training. **(T-0)**. Personnel working at TSDf and environmental cleanup sites will need to adhere to Occupational Safety and Health Administration (OSHA) Hazardous Waste Operations and Emergency Response requirements as required under 40 CFR Part 264, Subpart B, *General Facility Standards* and 29 CFR **Part 1910**. **(T-0)**.

5.6.1.2. Personnel preparing HW for shipment receive Department of Transportation (DOT) training applicable to the level of the work as prescribed by the DOT regulations in accordance with 49 CFR Parts 171-180, *Hazardous Materials Regulations*, and the Defense Transportation Regulation (DTR) 4500.9-R, *The Defense Travel Regulation*, **Part II**, "Cargo Movement," **Chapter 204**, "Hazardous Materials," as follows:

5.6.1.2.1. Persons involved with preparing HW shipments or who only certify HW shipments (that is, authorized by the installation commander to certify EPA HW manifests or shipping papers) shall successfully complete training in accordance with Paragraph D.1.c. in DTR 4500.9-R, **Part II, Chapter 204**. **(T-0)**. This training may be locally available through qualified Transportation personnel, U.S. DoT Pipeline and Hazardous Materials Safety Administration web-based Training Modules, AFCEC sponsored training, commercial vendor, or at the training locations identified in DTR 4500.9-R, **Part II, Chapter 204**, D.1.h.

5.6.1.2.2. Supervisors will ensure refresher training for HW personnel involved with HW for shipment is in accordance with training frequency specified in DTR 4500.9-R, **Part II**. **(T-0)**. The DOT training frequency specified in DTR DoDR 4500.9-R, **Part II** is every two years. However, HW program managers/other workers who are only signing HW manifests need the training every three years. Check with the Installation Environmental Element for training sources and frequencies.

5.6.1.3. Supervisors shall examine employee training to ensure that adequate site and task-specific familiarization is accomplished, and supplemented with on-the-job training, as needed. **(T-3)**. HW generators must retain personnel training records and those of former employees in accordance with AF Records Disposition Schedule. **(T-1)**.

5.6.1.4. Supervisors must ensure records of HW training are on-site and available for inspection to meeting recordkeeping requirements under 40 CFR Part 262, Subpart A or 40 CFR Part 265, Subpart B. **(T-0)**. Originals of these records may be kept by AF Form 1098, *Special Task Certification and Recurring Training*; AF Form 55, *Employee Safety and Health Record*; installation centralized training records; computer database; or letters of completion. At a minimum, supervisors will ensure training records include the student's name, job title, job description, previous HW training, dates of training, instructor's name (or functional area), test score (if applicable), and date of annual refresher course. **(T-0)**.

5.6.1.5. Installations must give priority to using HAF-approved HW education/ training sources such as AFIT Civil Engineer School HW Course WENV 521 and WESS 010 HW Accumulation Satellite seminar, and the AF HW web-based training available from AFCEC. **(T-3)**.

5.6.2. Permits, Recordkeeping, and Reporting.

5.6.2.1. Facility permits shall remain the responsibility of the installation commander as owner and signature cannot be delegated, consistent with 40 CFR Part 270. **(T-0)**. For installations outside the US and US territories, the host commander or host nation representative may be the signing authority. Installations will provide AFCEC/CZ a copy of each signed HW permit. **(T-1)**.

5.6.2.2. For HW shipments, installation Commanders ensure signature delegation remains with qualified (trained) DoD employees (civilian, military, guard, reserve, or foreign national), or appropriately assigned state employees in the case of ANG. The person delegated to sign manifests must be physically present during transfer or shipment of waste off-site. **(T-1)**. Contractor representatives can be designated by supporting installations to sign manifests at geographically separated units or remote sites.

5.6.2.3. Installations will track HW with the EPA HW manifest (or approved documentation) and report HW management activities using the standard AF Information Technology, the Enterprise, Environmental, Safety and Occupational Health – Management Information System (EESOH-MIS). **(T-1)**.

5.6.2.4. Installations will retain all notices, certifications, manifests, and waste analyses in accordance with AFMAN 33-363 from the date the HW was shipped to a TSDF or Defense Logistics Agency Disposition Services in accordance with the AF Records Disposition Schedule. **(T-1)**.

5.6.2.5. Installations with Part B permitted TSDF must maintain all documentation of wastes managed at the facility and all facility records past the closure of the facility and in accordance with the AF Records Disposition Schedule. **(T-1)**.

5.6.2.6. Installations must maintain all HW disposal records and report HW information in accordance with AF policy and data reporting requirements. **(T-1)**.

5.6.3. Accumulation.

5.6.3.1. HW generating and storage activities will accumulate HW in accordance with applicable DoD, federal, state, and local laws and regulations, as well as FGS or OEBGD requirements. **(T-0)**.

5.6.3.1.1. Installations will maintain the minimal number of Initial Accumulation Points (satellite accumulation area) and Hazardous Waste Accumulation Sites (HWAS) necessary to perform their mission and meet regulatory requirements. **(T-3)**.

5.6.3.1.2. Each waste-generating process owner shall appoint a primary and alternate site manager for each initial accumulation point and/or accumulation site. **(T-1)**.

5.6.3.2. Installations are prohibited from the management of non-DoD toxic or HW, or the storage or disposal of non-DoD toxic or HW on DoD installations in accordance with 10 USC § 2692, Storage, Treatment, and Disposal of Nondefense Toxic and Hazardous Materials, and DoDI 4715.06. **(T-0)**. Non-DoD toxic or HW is waste generated or stored for activities not related to DoD missions and operations.

5.6.3.2.1. Exceptions may be granted under the provisions in 10 USC § 2692, such as to protect the health and safety of the public from imminent danger (e.g., temporary storage or disposal of non-DoD explosives). For the AF, SAF/IEE will make determinations of applicable exemptions to this requirement.

5.6.3.2.2. This prohibition does not apply to the storage, treatment, or disposal of materials used in connection with an activity of the DoD.

5.6.3.2.3. Non-DoD tenants are considered other “persons” under RCRA and operate their HW activities independent of the AF installation, using their own EPA identification numbers. Issues related to this requirement are resolved through the installation SJA.

5.6.3.3. Installations/MAJCOMs shall follow the exception approval process of AF Real Property directive guidance applicable to the granting of temporary use of AF real property such as outgrants for storing and disposing of non-DoD-owned hazardous or toxic materials. **(T-1)**. Also, for non-DoD explosive material management, installations follow AFMAN 91-201.

5.6.3.4. The BCE will ensure the owner of the waste meeting the exception criteria complies with 10 USC § 2692 by preparing and obtaining all needed permits, required environmental documentation, and licenses or leases, before using AF property. **(T-0)**. , Also, in accordance with 10 USC § 2692, the base must get a written, signed agreement with the owner of the non-DoD waste with appropriate provisions, such as meeting all financial requirements, leaving the facility in its original condition, indemnifying the AF and covering the costs of any cleanup required. **(T-0)**.

5.6.4. Turn-in and Disposal Procedures.

5.6.4.1. For HAZMAT.

5.6.4.1.1. Installation HW generating activities must ensure maximum reuse of HAZMAT prior to disposal. **(T-3)**. For details on handling excess HAZMAT and ozone depleting substances (ODS), see [Chapter 3](#) of this AFMAN.

5.6.4.1.2. Installations must ensure that HAZMAT deemed unusable or that has failed Defense Logistics Agency’s Reutilization, Transfer, Donation or Sale program, is disposed of properly in accordance with hazardous waste generator requirements in 40 CFR Parts 261-262. **(T-0)**.

5.6.4.2. For Hazardous Waste (HW).

5.6.4.2.1. The Installation Environmental Element will ensure installation HW generators follow procedures in DoDM 4160.21, Volume 2, Enclosure 7, for managing HW for turn-in to the Defense Logistics Agency or alternate disposition services. **(T-0)**.

5.6.4.2.2. DD Form 1348-1A, *Issue Release/Receipt Document (Disposal Turn-In)*, will be completed and EESOH-MIS will be used to electronically transfer requests to DLA for the turn-in of HW or HAZMAT for disposal using instructions in DoDM 4160.21, Volume 1, Enclosure 4. **(T-0)**. EESOH-MIS interfaces with the DLA's Generator Communication (GenComm) system which ensures equivalent information from the DD Form 1348-1A is captured in discrete data fields.

5.6.4.2.3. Installations will follow turn-in procedures in DoDM 4160.21, Volumes 2, 3 and 4, for turn-in of HW and other hazardous property to the DLA. **(T-0)**. DoDM 4160.21 provides special instructions for Reutilization, Transfer, Donation or Sale or disposal of specific hazardous property that could be HW when disposed (e.g., batteries, dental material).

5.6.4.2.4. The Installation Environmental Element will ensure all HW is weighed in the presence of an AF or DLA government appointed official before removal from the installation for shipment to a TSDF. **(T-1)**.

5.7. HW Self-Assessment and Corrective Action.

5.7.1. Inspections.

5.7.1.1. Installation HW generators will perform environmental compliance assessments of their accumulation sites, HWAS, and/or TSDFs consistent with AFI 32-7001 and AFI 90-201 wing-level self-inspection requirements. **(T-1)**.

5.7.1.2. Installation civil engineering will ensure no-notice inspections of HW generation, accumulation, storage, and disposal activities at least once per year, consistent with the AF Environmental Inspection Process described in AFI 32-7001. **(T-3)**.

5.7.2. Metrics. Installation Environmental Element HW managers will ensure metrics are established consistent with DoD policy to check and report on the effectiveness of meeting the objectives of the program. **(T-3)**.

CHAPTER 6

INTEGRATED SOLID WASTE MANAGEMENT

6.1. General Requirements.

6.1.1. Installations will use DoDI 4715.23 as the key policy document with specific requirements and guidance for establishing and operating an ISWM and a Qualified Recycling Program (QRP). **(T-0)**.

6.1.2. The installation BCE will make every practical effort to maximize non-hazardous SW and Construction and Demolition (C&D) debris diversion from landfills or incinerators through reuse, donation, recycling, QRPs, composting and mulching, or other waste diversion activities. **(T-2)**. Installations use the EPA pollution prevention methodology (**Paragraph 5.1**) to optimize reduction in both the volume of SW disposed and overall cost of non-hazardous SW management.

6.1.3. The BCE will make systematic waste diversion or disposal decisions based on the EPA pollution prevention methodology as described in DoD 4715.23, which translates to the DoD ISWM hierarchy. **(T-0)**. The DoD ISWM hierarchy is as follows: source reduction, reuse, donation, recycling, composting/mulching, incineration with energy recovery, incineration for volume reduction, other forms of volume reduction and finally landfill disposal.

6.2. Integrated Solid Waste Management (ISWM) Plan.

6.2.1. The BCE will have a complete ISWM Plan in accordance with DoDI 4715.23. **(T-0)**. The plan includes SW diversion goals and contains guidance for managing municipal SW, compostable materials, construction and demolition debris, and industrial SW. In accordance with DoDI 4715.23, the ISWM plan will:

6.2.1.1. Use results of a SW characterization study to define the basis for the installation-level diversion goals and applicable DoD goals. **(T-0)**.

6.2.1.2. Ensure procedures to support implementation of federal, state, interstate, and local laws or plans required by 40 CFR Parts 239-258, *Non-hazardous Waste*, if applicable. **(T-0)**.

6.2.2. The ISWM plan will be developed using the standardized plan template specified by AFCEC/CZ. **(T-1)**.

6.2.3. All ISWM Plans must be annually reviewed and updated, as appropriate. **(T-1)**. The Installation Cross-Functional Team (AFI 32-7001) can review on behalf of the installation Environmental, Safety and Occupational Health Council (ESOHC). For major revisions, minutes of the ESOHC meeting can be used to document coordination/approval of the ESOHC without need for actual signature(s).

6.2.4. The BCE will also consider incorporating key actions of the ISWM plan into the Base Asset Management Plan and discuss strategies to meet SW diversion goals. **(T-3)**.

6.3. Recordkeeping and Reporting.

6.3.1. The BCE will maintain copies of weight certificates, shipping receipts, financial statements, and all other related documentation from SW generating contractors. **(T-1)**.

6.3.2. Owners or operators of municipal SW (MSW) landfill units must comply with the recordkeeping requirements of 40 CFR Part 258.29, *Criteria for Municipal Solid Waste Landfills: Recordkeeping Requirements*. (T-0). Follow records handling specified in the AF Records Disposition Schedule.

6.3.3. The Installation Environmental Element, in accordance with AFI 32-7001, ensures the collection, consolidation, maintenance, and reporting of installation-level SW data required for the DEPARC in accordance with 10 USC § 2706, *Annual Reports to Congress*, and for annual Environmental Management Reviews with the Office of the Secretary of Defense. (T-0).

6.4. Handling, Storage, and Collection.

6.4.1. The BCE will ensure that receptacles, collection routes, collection schedules, and collection equipment (trucks/trailers) meet 40 CFR Part 243, *Guidelines for the Storage and Collection Of Residential, Commercial, and Institutional Solid Waste*, as well as state, local, and FGS requirements, or Overseas Environmental Baseline Guidance Document (OEBGD) in the absence of an FGS. (T-0).

6.4.2. The Installation Environmental Element, or designated installation contractors, will obtain all RCRA or state equivalent permits necessary for SW management, operation of landfills, material recovery facilities, or for handling, storage, and collection involving composting (including SW transfer facilities), as required under 40 CFR Part 239, *Requirements for State Permit Program Determination of Adequacy*, 40 CFR Part 257, *Criteria for Classification of Solid Waste Disposal Facilities and Practices*, and 40 CFR Part 258 for municipal SW landfills. (T-0). Perform any required maintenance and monitoring activities specified in the RCRA Subtitle D permit consistent with 40 CFR Part 239 and 40 CFR Part 257. (T-0).

6.4.3. Installations must ensure all SW originating from outside the U.S. are segregated and disposed of in accordance with 7 CFR Part 330, *Federal Plant Pest Regulations*; 9 CFR [Part 94.5](#), *Regulation of Certain Garbage*; and Armed Forces Pest Management Board Technical Guide Number 4, *Disinsection of Military Aircraft*. (T-0).

6.5. Municipal Solid Waste (MSW).

6.5.1. Installation MSW management will include a recycling program that will follow the hierarchy laid out in Section 3.2 of DoDI 4715.23, including diverting (reusing, donating, or recycling) as much MSW as economically and technically practical. Management of white paper, newsprint, and cardboard must meet 40 CFR Part 246, *Source Separation for Materials Recovery Guidelines*; and any state, local; while overseas installations will implement applicable FGS requirements, or the OEBGD in the absence of FGS requirements. (T-0). Installation-recycling program will address MSW handling, storage, collection, sales, record keeping, and reporting.

6.5.2. If MSW is disposed of, it must be done in a permitted and secure landfill, or other certified waste treatment facility, such as a thermal-processing facility, as required under 40 CFR Part 257. (T-0). Installations must verify permits and licenses for off-base landfills, incinerators, and thermal treatment facilities used for disposal under 40 CFR Part 445, Subpart B, *Landfills Point Source Category or RCRA Subtitle D Non-Hazardous Waste Landfill*. (T-1).

6.5.3. Installations will obtain validation from AFCEC/CZ and then seek approval from AF/A4C, if a local decision is made to use on-site option for the disposal of MSW. **(T-1)**.

6.6. SW Diversion.

6.6.1. Installations must strive to divert as much of the SW stream from disposal in the most cost-effective manner possible in accordance with DoDI 4715.23, with consideration given to cost savings and cost avoidance. **(T-0)**.

6.6.2. Legal Recycling Requirements. Installations will comply with 40 CFR Parts 246.200-1 et seq., 201-1 et seq., and 202-1 et seq. (FGS or OEBGD for overseas bases) to address high grade paper, used newspaper, and waste corrugated containers. **(T-0)**.

6.6.2.1. Any installation that has determined, in accordance with 40 CFR Part 246, that it will not follow the requirements of 40 CFR Part 246, must submit a request to AF/A4C (through AFCEC/CZ) for review and to process a waiver, which in accordance with 40 CFR Part 246.100(f), will include a report with analysis and rationale used in making that determination. **(T-0)**. SAF/IEE will submit to the EPA within 60 days after making a final determination. EPA will then render a concur/non-concur decision after publication in the Federal Register.

6.6.2.2. For commodities required to be recycled under applicable federal, state, interstate or local laws and regulations, installations do not have to complete an economic feasibility analysis to justify recycling. However, installations will conduct market research and analysis to identify the most cost-effective recycling opportunities for these commodities. **(T-3)**.

6.6.3. Qualified Recycling Programs (QRPs) and Other Recycling Options. Installations may establish QRPs in accordance with DoDI 4715.23, Section 4, if it is economically beneficial to retain sales revenue from recycled materials. QRPs must be operated in accordance with 10 USC § 2577 and 32 CFR Part 172 to ensure proper allocation of sales revenue. **(T-0)**.

6.6.3.1. The installation commander designates, in writing, personnel authorized to conduct QRP direct sales and award sales agreements; and establishes a QRP committee and designate a chair. Alternatively, the commander can designate a SW manager if no QRP exists on the installation. The installation ESOHC supports the installation commander in overseeing recycling efforts.

6.6.3.2. QRPs will conduct competitive sales in accordance with 40 USC §§ 521-555, *Federal Property and Administrative Services, Use of Property* and portions of 41 CFR Part 102-38, *Sale of Personnel Property*. **(T-0)**. The lack of an existent and related warrant by the installation contracting organization does not preclude the QRP from conducting sales of eligible items, either directly or through the Defense Logistics Agency (DLA). The QRP, and by extension, the designated QRP manager, may conduct negotiated sales for any QRP eligible items with anticipated sales proceeds of \$15,000 or less and competitive sales that have no monetary limit for each sale.

6.6.3.3. QRP Organization. Installations with recycling programs are authorized to set up a single QRP to serve all AF and tenant organizations occupying space on an installation. The installation QRP serves as an umbrella organization for up to four separate recycling

organizations: an appropriated funds activity, a Services (non-appropriated funds operation, an AAFES section, and a Defense Commissary Agency section.

6.6.3.4. QRP Business Plan. Installation QRPs must develop and maintain a current business plan in accordance with DoDI 4715.23, which addresses QRP management, facilities, manpower, equipment and services, record keeping and auditing, an economic and market analysis, a financial plan and an economic analysis of alternatives. **(T-0)**.

6.6.3.4.1. An installation conducts annual economic analyses based on industry and market research to justify non-mandatory recycling efforts. Non-directive guidance and best practices for completing economic and market analysis/assessment, and documentation of the lack of recycling efforts, are included in the ISWM Playbook.

6.6.3.4.2. Installations must adequately justify the decision to not divert or recycle mandatory and recommended items consistent with DoDI 4715.23. **(T-0)**. This can be documented in a QRP Business Plan or other documentation, economic and market analysis, etc.

6.6.3.4.3. AFCEC/CZ must review installation QRP financial performance, validate installation SW and QRP data (prior to up-reporting), and monitor installation QRP proceeds in the F3875 Budget Clearing Account (Suspense), or other SAF/FM specified account, balances to ensure appropriated funds are properly reimbursed to meet federal law as outlined in DoDI 4715.23. **(T-0)**. OSD is shifting away from use of the F3875 treasury account in 2020 (see [Attachment 1](#), Terms) and AFCEC/CZ will need to consult with SAF/FM on new Air Force procedures and inform the installations.

6.6.3.5. Installations or organizational proponents with contracted activities that generate waste must ensure that, to the extent required by law (as outlined in DoDI 4715.23), provisions are included in the contract to obligate the contractor to participate in the installation's program (whether QRP or otherwise) for recyclable wastes generated on the installation, where applicable. **(T-0)**. Contracts covering government-owned, contractor-operated (GOCO) facilities include provisions that obligate the contractor to participate in the installation recycling program, or if one does not exist, establish its own recycling program. If needed, existing contracts covering GOCO facilities are modified to incorporate these provisions.

6.6.3.6. QRP Financial Management. The QRP financial management process includes obtaining and managing start-up costs, recurring operating costs, as well as managing proceeds from recyclable material sales in accordance with criteria in 10 USC § 2577. If a QRP is in place, SW diversion revenue for diverted materials that otherwise qualify as "eligible" under 32 CFR Part 172, are retained in the F3875 account (or equivalent) for distribution consistent with the formula in 10 USC § 2577 (b). QRP sales revenues are first used to cover QRP operating and program cost and reimburse QRP use of installation O&M funds. Installations will ensure QRP financial management activities are conducted in accordance with AFI 65-601, Volume 1, *Budget Guidance and Procedures* and DoD 7000.14-R, *Financial Management Regulations* (current edition) as described in DoDI 4715.23. **(T-0)**. Detailed AF budget guidance, including QRP, is provided in AFMAN 65-605, Volume 1.

6.6.3.7. QRP Proceeds Management.

- 6.6.3.7.1. Installations involved in the direct sales of scrap material must establish and manage a QRP F3875 Budget Clearing Account (Suspense) in accordance with 32 CFR Part 172 and 32 CFR Part 172.5, *Procedures, Disposition of Proceeds from DoD Sales of Surplus Property*, or other authorized account as specified by SAF/FM, for the collection of QRP proceeds up to \$10 million. **(T-0)**. Note: OSD is shifting away from use of the F3875 treasury account in 2020 (see [Attachment 1](#), Terms) and installations will need to consult with their FM office and AFCEC/CZ for new Air Force procedures and thresholds of proceeds it can use before turning in to the treasury.
- 6.6.3.7.2. Installation QRP will first use QRP proceeds to cover or reimburse costs attributable to the installation recycling program incurred in the same fiscal year as the proceeds are earned in accordance with 10 USC § 2577. **(T-0)**. This includes, but not limited to, manpower, facilities, equipment, overhead and other capital investments. Installations must consult with their fiscal attorney and AFCEC/CZ on the proper reimbursement of labor and transportation costs. **(T-3)**.
- 6.6.3.7.3. Installation QRP makes the determination of surplus proceeds annually at the end of each fiscal year. The following describes how the surplus proceeds are to be expended: if a surplus remains in the account after reimbursing the appropriation, in accordance with DoDI 4715.23, not more than 50 percent of that balance will be used at the installation for projects for pollution abatement, energy conservation, and occupational safety and health risk reduction activities. **(T-0)**. The remaining balance available to a military installation may be transferred to the non-appropriated morale, welfare and recreation (MWR) account of the installation to be used for any MWR activity. Any balance in excess of \$10 million is transferred to the Department of Treasury. Follow AFI 65-106, *Appropriated Fund Support of Morale, Welfare, and Recreation (MWR) and Other Nonappropriated Fund Instrumentalities (NAFIS)* and check latest thresholds with the local FM office or AFCEC/CZ.
- 6.6.3.7.4. The installation QRP manager must annually confirm to AFCEC/CZ that the annual provision has been extended and enacted. **(T-1)**. Any unused balances of QRP proceeds (up to \$10 million, but check latest approved thresholds with the local FM or AFCEC/CZ) are available until expended (e.g., may be carried over into subsequent fiscal years) unless Congress reverses this provision in an applicable appropriation law for a specific fiscal year. For any revenues carried over into a new fiscal year (FY), the same restrictions specified in [Paragraphs 6.6.3.7.2](#) and [6.6.3.7.3](#) apply.
- 6.6.3.7.5. The QRP manager must consistently process and track any outstanding recouping actions for un-reimbursed DLA-Disposition Services scrap sales, with the assistance of the appropriate resource personnel. **(T-3)**.
- 6.6.3.7.6. The QRP manager will prepare a FY operating budget to document estimated QRP income and expenses. **(T-1)**.
- 6.6.3.7.7. The QRP Manager conducts recyclable commodities direct sales in accordance with 10 USC § 2577; 40 USC §§ 541-559, *Federal Property and Administrative Services, Disposing of Property*; 32 CFR Part 172; and DoD 7000.14.R.
- 6.6.4. Composting. Installations will, as appropriate, operate a composting program or participate in a regional composting program. **(T-3)**. Installations operating composting

programs will meet state/local requirements and municipal waste requirements under 40 CFR Part 445, Subpart B; while overseas installations will implement FGS requirements, or the OEBGD in the absence of FGS. **(T-0)**. This includes restrictions for composting putrescible materials/putrescible waste.

6.6.5. Installations and GSUs. For the purposes of this AFMAN, GSUs are federal facilities that are considered installations for the purpose of complying with the Resource Conservation and Recovery Act (RCRA). GSUs are subject to the SW and recycling requirements of this AFMAN, but would come under the program of a non-contiguous supporting installation if the GSU has no management and support structure of its own. Same can apply for ANG or AFR units located on a RegAF host-base as long as reflected in host-tenant support agreement. GSUs will have access to a QRP F3875 Budget Clearing Suspense Account (or alternate O&M), be assigned a QRP manager, and come under oversight of the supporting installation Environmental, Safety and Occupational Health (ESOH) Council, in order to operate a QRP. **(T-1)**. Note: OSD is shifting away from use of the F3875 treasury account in 2020 (see [Attachment 1](#), Terms) and installations will need to consult with their FM office and AFCEC/CZ for new Air Force procedures.

6.7. Defense Working Capital Fund Activities. Installations will manage SW sales consistent with QRP financial management and in accordance with DoD 7000.14-R. **(T-0)**.

6.8. Construction and Demolition (C&D) Debris.

6.8.1. All aspects of installation C&D debris management will be included in the Installation Solid Waste Management Plan (ISWM) Plan. **(T-1)**.

6.8.2. Installation civil engineering must ensure weight and cost data for C&D debris diverted and disposed are documented and reported to the Office of the Secretary of Defense in accordance with DoDI 4715.23. **(T-0)**. Base civil engineering will review all C&D debris disposal contracts to ensure this requirement is being met. **(T-1)**. The BCE will compile and report this information to AFCEC/CZ annually for input to the DoD environmental reporting system, in accordance with annual DoD environmental reporting requirements outlined and defined in DoDI 4715.23. **(T-0)**.

6.8.3. Construction and Demolition (C&D) debris will be considered SW and appropriately characterized in accordance with applicable DoD, Federal, state or local characterization requirements under 40 CFR Part 261 to determine whether to dispose of as non-hazardous SW or HW. **(T-0)**.

6.8.4. C&D classified as HW will be disposed of in a permitted facility in accordance with 40 CFR Part 262. **(T-0)**. C&D determined to be HW is separated from non-HW, appropriately containerized, labeled and properly manifested in accordance with 40 CFR Part 262.23 prior to transportation for final disposal. **(T-0)**.

6.9. Asbestos-contaminated C&D Management

6.9.1. Installation civil engineering must treat the asbestos-contaminated C&D debris generated from construction, renovation, or demolition activities as asbestos-containing waste, labeled in accordance with 29 CFR Part 1926.1101, *Toxic and Hazardous Substances: Asbestos*, and disposed of in accordance with 40 CFR [Part 61.150](#), *Standard for Waste*

Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations and any state-specific transportation and disposal requirements. **(T-0)**.

6.9.2. Installations must maintain waste shipment records for asbestos-containing waste at least two years in accordance with 40 CFR **Part 61.150(d)(1)**, or longer if required by the AF Records Disposition Schedule. **(T-0)**.

6.10. Lead Based Paint (LBP)-Contaminated Construction & Demolition Debris Management

6.10.1. Installations must ensure construction, renovation or demolition debris that involves lead-containing materials is managed in accordance with applicable federal Toxic Substances Control Act requirements under 40 CFR Part 745, *Lead-Based Paint Poisoning Prevention in Certain Residential Structures*, and equivalent state, and local transportation, occupational health treatment, storage, and disposal requirements. **(T-0)**.

6.10.2. LBP that has been removed prior to construction, renovation or demolition can be either hazardous or non-HW depending on the method used to remove the LBP, and the nature of the material itself.

6.10.3. BE and CE personnel must conduct a review to validate manufacturer claims for certain products, that when used to strip or remove the LBP, will render the LBP non-hazardous, consistent with 40 CFR Part 261 requirements to identify if SW is HW. **(T-0)**. EPA requires the use of the Toxicity Characteristic Leaching Procedure test to determine if the lead in a waste stream is a HW. Lead-containing waste is considered hazardous if the concentration of lead analyzed in a Toxicity Characteristic Leaching Procedure test exceeds 5.0 milligrams lead per liter.

6.10.4. BE and CE must comply with OSHA occupational exposure control guidelines for lead in the construction industry (29 CFR Part 1926.62, *Lead*) for all facility LBP procedures. **(T-0)**.

6.10.5. CE will coordinate LBP activities, including disposal, with the appropriate state, county, and local agencies in advance of actions that may create a LBP hazard. **(T-1)**.

CHAPTER 7

TOXICS MANAGEMENT

7.1. Toxic Substances Control Act (TSCA). TSCA addresses the production, importation, use, and disposal of specific chemicals including Polychlorinated Biphenyl (PCBs), asbestos, and lead-based paint. Asbestos is also considered a HAP and, as such, is regulated under the Clean Air Act (CAA) National Emission Standards for Hazardous Air Pollutants (NESHAP). In June 2016, Congress amended the TSCA of 1976 by passing the Frank R. Lautenberg Chemical Safety for the 21st Century Act which provides EPA with expanded authority, dedicated funding, and an accelerated schedule to evaluate and regulate new and existing chemicals based on potential harm to human health. As amended, TSCA establishes statutory requirements and timelines for the EPA to continuously evaluate chemicals for potential additional regulation. The amended statute also provides EPA with the increased authority to restrict or prohibit uses of chemicals when environmental or health risks warrant.

7.1.1. Under the HAF Environment, Safety, and Occupational Health Council Steering Committee, the AF Hazardous Material Management Process (HMMP) Team works with the Office of the Secretary of Defense to provide the EPA with AF chemical usage data to support TSCA chemical risk evaluations and regulatory activities.

7.1.2. When the EPA proposes new chemical restrictions or prohibitions, the HAF HMMP team will work with SAF/IEE and AFCEC/CZ to notify affected AF organizations.

7.1.3. Installation environmental information management systems enable the HAF HMMP team to support the management of the constantly evolving regulatory risks posed by TSCA while minimizing or avoiding field-level data calls. Therefore, installations must ensure that Air Program Information Management System (APIMS), Environment, Safety, and Occupational Health - Management Information System (EESOH-MIS), and other systems are up-to-date and quality assured. **(T-1)**.

7.2. Management of Individual Toxics. The Installation Environmental Element will provide overall guidance on the legal, regulatory, and procedural requirements to the organization responsible for executing actions that impact toxic substances. **(T-1)**. For RegAF, toxics programs are implemented by the Civil Engineer Facility Operations Flight, Engineering Element, or Housing Element, as part of facility construction/renovation or equipment maintenance function for their respective areas. Further details are provided below for each of the primary program areas regulated under the Toxics program.

7.2.1. MANAGEMENT OF POLYCHLORINATED BIPHENYL (PCB) WASTES.

7.2.1.1. General Concepts.

7.2.1.1.1. PCB bulk product wastes include but are not limited to non-liquid bulk wastes or debris generated from the demolition of buildings and other man-made structures manufactured, coated, or serviced with PCBs as defined under 40 CFR Part 761, *Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions*, of TSCA regulations. PCB bulk product wastes also include PCB-containing wastes from the shredding of automobiles, household and industrial appliances, or other white goods (e.g., household major appliances); PCB impregnated electrical, sound deadening, or other types of insulation and gaskets; or

fluorescent light ballasts containing PCBs in the potting material. Project engineers and facility maintenance personnel must ensure sampling for PCBs is incorporated into demolition and renovation projects to define compliance requirements to correctly perform work, in order to manage and dispose of waste PCB material in accordance with 40 CFR Part 761, Subpart D, *Storage and Disposal*. **(T-0)**.

7.2.1.1.2. The PCB waste management program consists of the proper management of target PCB equipment, such as transformers and large capacitors containing greater than 50 parts per million (ppm) PCBs.

7.2.1.1.3. The AF is committed to eliminating target PCB equipment and reducing future liability for cleanup and disposal costs. Such a PCB-free designation, however, does not absolve an installation from its PCB management responsibilities. For example, a retro-filled transformer, once declared PCB-free, may currently contain PCB in concentration above 50 ppm due to PCB that has leached back into the oil from the surrounding casing/shell of the transformer.

7.2.1.1.4. AF installations outside the US and US territories will refer to **Chapter 14** of the Overseas Environmental Baseline Guidance Document (OEBGD), or the country-specific FGS, as appropriate, for PCB requirements relevant to those installations. **(T-0)**.

7.2.1.2. Recordkeeping.

7.2.1.2.1. Installations will ensure a management program for target PCB equipment, track regulated PCB disposal with the EPA PCB manifest (EPA Form 8700-22, *Uniform Hazardous Waste Manifest*), and report PCB management activities per 40 CFR Part 761. **(T-0)**. Installations will ensure forms are obtained through a source that has been approved by the EPA Manifest Registry in accordance with 40 CFR Part 761, Subpart K, *PCB Waste Disposal Records and Reports*. **(T-0)**.

7.2.1.2.2. Installations must record the dates when PCBs or PCB items were removed from service on the manifest or continuation sheet that accompanies the PCB waste to commercial storage and disposal facilities consistent with 40 CFR Part 761, Subpart K. **(T-0)**.

7.2.1.2.3. Generators must keep a copy of the manifest for as long as required by the AF RDS from the date the PCB waste was accepted by the initial transporter. **(T-1)**.

7.2.1.2.4. Installations must maintain certificates of disposal in accordance with 40 CFR Part 761.180(a), *Records and Monitoring*, except that the retention method and period prescribed in the AF RDS apply if greater than the EPA requirement. **(T-0)**.

7.2.1.2.5. Installations must maintain annual document logs in accordance with 40 CFR Part 761.180(a), except that the retention method and period prescribed in the AF RDS apply. **(T-0)**.

7.2.1.3. PCB Waste Disposal.

7.2.1.3.1. Installations must ensure compliance with PCB disposal requirements found at 40 CFR Part 761 and applicable state or applicable local regulation. **(T-0)**.

7.2.1.3.2. Transboundary Shipments of PCBs for Disposal. In general, PCBs and PCB-containing items require an EPA TSCA exemption for importation to the United States or for exportation to other countries for disposal. Other treaties and international agreements may also apply to exportation. Retrograde of U.S.-manufactured PCBs from AF bases outside the continental United States is not considered export or import of PCBs under TSCA. The Defense Logistics Agency-Disposition Services is the responsible agency for worldwide disposal of all PCBs and PCB items.

7.2.2. LEAD-BASED PAINT MANAGEMENT.

7.2.2.1. Regulatory Drivers.

7.2.2.1.1. 15 USC § 2681, *Title IV of the Toxic Substances Control Act, Lead Exposure Reduction*, as well as 42 USC §§ 4851-4856, *Residential Lead-based Paint Hazard Reduction*, establish the requirements for those responsible for the renovation, repair, or painting of any target housing or child-occupied facility. Child-occupied facilities may include, but are not limited to daycare centers, preschools, or kindergarten classrooms. Under these legal requirements, the EPA established the regulations listed below. Civil Engineer Operations, Engineering, and Housing activities must comply with these regulations in the performance of maintenance and construction activities. **(T-0)**.

7.2.2.1.2. 40 CFR Part 745 (and applicable State and local lead-based paint management requirements) identifies lead-based paint hazards and sets standards for dangerous levels of lead in paint, household dust, and residential soil. This regulation establishes requirements for those engaged in renovation, repair, or painting activities in homes or child-occupied facilities built prior to 1978 that they be trained and certified in lead-safe work practices, and use these work practices to guard against lead contamination. It also requires that contractors provide information on lead safety prior to beginning work. The regulations further require those engaged in lead abatements, risk assessments and inspections in homes or child-occupied facilities built prior to 1978 be trained and certified in specific practices to ensure accuracy and safety.

7.2.2.1.3. In accordance with 40 CFR Part 745, Subpart E, *Residential Property Renovation*, to include child occupied facilities, installation Housing, the BCE, or privatized housing contractor must notify occupants about the presence of any known lead-based paint or lead-based paint hazards before any renovations begin. **(T-0)**. This applies to potential occupants of housing built prior to 1978. They should receive certain information about lead and lead hazards in their residential prospective. Follow lead-based paint requirements of AFI 32-6001, *Family Housing Management*.

7.2.2.1.4. In the case of privatized housing, installation CE or CE housing must ensure that the contract or lease includes provisions for occupant notification and that the notifications are taking place as required under 40 CFR Part 745, Subpart E and 40 CFR Part 745, Subpart F, *Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards Upon Sale or Lease of Residential Property*.

7.2.2.1.5. 29 CFR Part 1926.62 establishes occupational exposure control guidelines for lead in the construction industry. General industrial standard/non-construction can be found in 29 CFR **Part 1910**.

7.2.2.1.6. In accordance with 40 CFR Part 745, Subpart L, *Lead-Based Paint Activities*, installation Housing, the BCE, or privatized housing contractor will ensure construction projects with the potential to impact lead-based paint must include appropriate references, clauses, or both, necessary to ensure proper management, control (including dust control), abatement, and disposal of lead-based paint. **(T-0)**. Privatized housing contractors may be responsible for lead-based paint notification, abatement, and disposal per the terms of their contract or lease.

7.2.2.2. Recordkeeping and Information Requirements.

7.2.2.2.1. The BCE must ensure all records necessary to demonstrate compliance with the requirements of 40 CFR Part 745, Subpart E, are retained for a period of at least 3-years following completion of the renovation. **(T-0)**. Additional retention requirements are in accordance with the AF Records Disposition Schedule located in the AF Records Information Management System.

7.2.2.2.2. Records that must be retained and information distributed in accordance with 40 CFR Part 745, Subpart E, shall include (where applicable):

7.2.2.2.2.1. Records or reports certifying that a determination had been made that lead-based paint was not present on the components affected by the renovation, as described in 40 CFR Part 745.82(a), *Applicability*. **(T-0)**.

7.2.2.2.2.2. Signed and dated acknowledgments of receipt as described in 40 CFR Part 745.84, *Information Distribution Requirements*. **(T-0)**.

7.2.2.2.2.3. Certifications of attempted delivery as described in 40 CFR Part 745.84. **(T-0)**.

7.2.2.2.2.4. Certificates of mailing as described in 40 CFR Part 745.84. **(T-0)**.

7.2.2.2.2.5. Records of notification activities performed regarding common area renovations and renovations in child-occupied facilities in accordance with 40 CFR Part 745.84. **(T-0)**.

7.2.2.2.2.6. Documentation of compliance with the requirements of 40 CFR Part 745.85, *Work Practice Standards*, including documentation that a certified renovator was assigned to the project, that the certified renovator provided on-the-job training for workers used on the project, that the certified renovator performed or directed workers who performed all of the tasks described in 40 CFR Part 745.85. **(T-0)**. In addition, compliance documentation must show that the certified renovator performed the post-renovation cleaning verification described in 40 CFR Part 745.85. **(T-0)**.

7.2.2.2.2.7. If the renovation firm was unable to comply with all of the requirements of this rule due to an emergency as defined in 40 CFR Part 745.82, the renovator must document the nature of the emergency and the provisions of the rule that were not followed. **(T-1)**.

7.2.2.2.3. If dust clearance sampling is performed in lieu of cleaning verification as permitted by 40 CFR Part 745.85(c), base civil engineering will ensure that within 30 days of the completion of the renovation, a copy of the dust sampling report is provided

to an adult occupant of the residential dwelling or an adult representative of the child-occupied facility, if the renovation took place within a child-occupied facility. **(T-1)**.

7.2.2.3. Lead-Based Paint Waste Disposal.

7.2.2.3.1. Residential lead-based paint may be disposed of in construction and demolition (C&D) landfills or municipal SW landfills in accordance with 40 CFR Part 257 and 40 CFR Part 258 respectively.

7.2.2.3.2. Lead-based paint waste from industrial or commercial sources must be evaluated in accordance with 40 CFR Part 261 to determine if management and disposal as a characteristic hazardous waste (HW) is required. **(T-0)**.

7.2.3. ASBESTOS MANAGEMENT.

7.2.3.1. Regulatory Drivers. Asbestos-containing materials are commonly found in older building materials and related products such as building exterior surfaces; insulation in walls and ceilings; floor tiles and adhesives; furnace, boiler, and heater piping and insulation; and interior surface walls and ceilings. When disturbed, ACMs can become airborne, posing a significant risk to human health. Asbestos is regulated under federal law (as referenced below) and under state laws that often govern worker certification and demolition plan and notification requirements. Asbestos is regulated by EPA under TSCA regulations, 40 CFR Part 763, *Asbestos*, and the Clean Air Act (CAA) National Emission Standards for Hazardous Air Pollutants (NESHAP). AFI 32-1001 provides more detailed directive guidance on AF asbestos requirements and following requirements of TSCA and NESHAPs. Base civil engineering, to include civil engineer operations, engineering, and housing, will comply with the laws and regulations described below in the performance of maintenance, construction, and notification activities on AF facilities. **(T-0)**.

7.2.3.1.1. 15 USC §§ 2641-2656, *The Asbestos Hazard Emergency Response Act* and 15 USC §§ 2601-2692, *Toxic Substances Control Act (TSCA)*, defines asbestos as the asbestos varieties of: chrysotile (serpentine); crocidolite (riebeckite); amosite (cummingtonite/grunerite); anthophyllite; tremolite; and actinolite. This law requires local educational agencies to inspect their school buildings for asbestos-containing building material, prepare asbestos management plans and perform asbestos response actions to prevent or reduce asbestos hazards. The EPA also developed a model plan for states for accrediting persons conducting asbestos inspection and corrective-action activities at schools. Pursuant to 15 USC §§ 2641-2656 and , 40 CFR Part 763 requires local education agencies to inspect their school buildings for asbestos-containing building material, prepare asbestos management plans and perform asbestos response actions to prevent or reduce asbestos hazards. This may apply to Department of Defense Dependents Schools on AF installations in the United States.

7.2.3.1.2. 20 USC § 4011, *Asbestos School Hazard Abatement Reauthorization Act*. This law increased the number of training hours required for the training disciplines under the Asbestos Model Accreditation Plan and expanded the accreditation requirements to cover asbestos abatement projects in all public and commercial buildings in addition to schools.

7.2.3.1.3. 42 USC §§ 7401-7671q, *CAA*, established national emission standards for hazardous air pollutants, including asbestos. The asbestos NESHAP regulations (40

CFR **Part 61**, Subpart M: *National Emissions Standards for Asbestos*) specify work practices for asbestos to be followed during demolitions and renovations of all structures, installations, and buildings (excluding residential buildings that have four or fewer dwelling units). The regulations (or state implementing regulations, if applicable) require the owner of the building or the operator to notify the appropriate state agency before any demolition, or before any renovations of buildings that could contain a certain threshold amount of asbestos or asbestos-containing material. In addition, particular manufacturing and fabricating operations either cannot emit visible emissions into the outside air or must follow air cleaning procedures, as well as follow certain requirements when removing asbestos-containing waste.

7.2.3.1.4. 42 USC §§ 9601-9675, *Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)*. This law, also known as Superfund, was enacted to address abandoned HW sites in the U.S. Asbestos is designated as a hazardous substance with a reportable quantity per 40 CFR **Part 302**, *Designation, Reportable Quantities, and Notification*.

7.2.3.1.5. Occupational Safety and Health Administration (OSHA) Asbestos Construction Standard, 29 CFR Part 1926.1101, applies to construction work involving asbestos, including work practices during demolition and renovation, worker training, disposal of asbestos waste, and specification of permissible exposure limits.

7.2.3.2. Recordkeeping.

7.2.3.2.1. For each homogeneous area where all asbestos containing building material has been removed, the BCE will ensure that such records are retained permanently as part of the real property records of facilities with known asbestos-containing materials. **(T-1)**. Additional asbestos related retention requirements are in accordance with the AF Records Disposition Schedule located in the AF Records Information Management System.

7.2.3.2.2. The name and location of storage or disposal sites are recorded for asbestos containing building material removed. **(T-3)**.

7.2.3.2.3. For each preventive measure and response action taken for friable and non-friable asbestos containing building material and friable and non-friable suspected asbestos containing building material assumed to be asbestos containing material, the BCE or Contractor performing response actions will ensure, consistent with 40 CFR Part 763, Subpart E, the following:

7.2.3.2.3.1. The name and signature of any person collecting any air sample required to be collected at the completion of certain response actions, to include the locations where samples were collected, date of collection, the name and address of the laboratory analyzing the samples, the date of analysis, the results of the analysis, the method of analysis, the name and signature of the person performing the analysis, and a statement that the laboratory meets the applicable requirements. **(T-0)**.

7.2.3.2.3.2. For each person required to be trained, document the person's name and job title, the date that training was completed by that person, the location of the training, and the number of hours completed in such training. **(T-0)**.

7.2.3.2.3.3. For each time that periodic surveillance is performed, record the name of each person performing the surveillance, the date of the surveillance, and any changes in the conditions of the materials. (T-0).

7.2.3.2.3.4. For each time that cleaning is performed, record the name of each person performing the cleaning, the date of such cleaning, the locations cleaned, and the methods used to perform such cleaning. (T-0).

7.2.3.2.3.5. For each time that operations and maintenance activities are performed, record the name of each person performing the activity, the start and completion dates of the activity, the locations where such activity occurred, a description of the activity including preventive measures used, and if asbestos containing building material is removed, the name and location of storage or disposal site of the asbestos containing material. (T-0).

7.2.3.2.3.6. FOR EACH TIME THAT MAJOR ASBESTOS ACTIVITY IS PERFORMED, PROVIDE THE NAME AND SIGNATURE, STATE OF ACCREDITATION, AND IF APPLICABLE, THE ACCREDITATION NUMBER OF EACH PERSON PERFORMING THE ACTIVITY, THE START AND COMPLETION DATES OF THE ACTIVITY, THE LOCATIONS WHERE SUCH ACTIVITY OCCURRED, A DESCRIPTION OF THE ACTIVITY INCLUDING PREVENTIVE MEASURES USED, AND IF ASBESTOS CONTAINING BUILDING MATERIAL IS REMOVED, THE NAME AND LOCATION OF STORAGE OR DISPOSAL SITE OF THE ASBESTOS CONTAINING MATERIAL. (T-0).

7.3. EMERGENCY PLANNING AND COMMUNITY-RIGHT-TO-KNOW ACT (EPCRA) MANAGEMENT

7.3.1. Applicability: As a result of E.O. 13834, AF installations shall, to the extent permitted by White House implementation guidance or DoD policy, comply with the provisions of 40 CFR [Parts 350-372](#), *Superfund, Emergency Planning, and Community Right-To-Know Programs* in any State of the U.S., the District of Columbia, the Commonwealths of Puerto Rico, Guam, American Samoa, the U.S. Virgin Islands, the Northern Mariana Islands, and any other territory or Possession over which the U.S. has jurisdiction.

7.3.2. In accordance with DoDI 4715.06, AF installations shall follow this guidance and supplemental AFCEC guidance to meet EPCRA reporting requirements, including the Toxic Release Inventory (TRI). (T-0). Should EPA and DoD policy conflict, DoD policy or Presidential Executive Order implementation guidance takes precedence. If a conflict between DoD and EPA EPCRA policies causes a discrepancy to arise during an EPA or state EPCRA inspection, the installation shall refer the matter through its chain of command to the appropriate DoD Regional Environmental Coordinator. (T-0). The AF and REC will refer the matter to the Office of the Secretary of Defense which will consult with EPA to reconcile EPCRA policies.

7.3.3. EPCRA Report Submissions.

7.3.3.1. Each installation shall meet EPCRA reporting “deadline” requirements as set by EPA under EPCRA Sections 311-313, to include annual reporting requirements of the EPCRA Section 313, Toxic Release Inventory (TRI). (T-0).

7.3.3.2. The Installation Environmental Element must also submit copies of EPCRA Section 313 Form R reports to AFCEC/CZ using EPA's current automated TRI reporting software. **(T-1)**.

7.3.3.3. The AF, as the host installation, will include all DoD Services' activities performed on-site in its EPCRA compliance and reporting consistent with DoDI 4715.06. **(T-0)**. Other (non-DoD) federal agencies' activities at the installation that are not in support of DoD are excluded from EPCRA calculations and reporting by the host installation. Each federal agency (e.g., U.S. Coast Guard, Federal Bureau of Investigation, and Bureau of Prisons) is responsible for its own EPCRA compliance. However, should a host installation know of an unreported, reportable release from a tenant non-DoD federal agency facility, the AF installation ensures proper EPCRA reporting.

7.3.4. EPCRA Documentation.

7.3.4.1. The Installation Environmental Element shall conduct the necessary efforts to determine whether reporting is required under each section of EPCRA. **(T-3)**.

7.3.4.2. The Installation Environmental Element must maintain supporting documentation of these efforts, even if reports are not required to be submitted. **(T-3)**.

7.3.4.3. The Installation Environmental Element must maintain ensure applicable EPCRA documentation are maintained on site for a minimum of five years, unless a cross governing regulation (e.g., the Resource Conservation and Recovery Act) requires the installation to retain the records for a longer period. **(T-1)**. For TRI data, facilities will archive previous versions of TRI-ME software for five years. **(T-1)**.

7.3.5. EPCRA Determinations: In accordance with DoD policy (DoDI 4715.06, etc.), an AF installation is considered one facility for purposes of EPCRA compliance and includes all on-site activities performed by all DoD and DoD contractor personnel in support of the DoD. Adjacent or non-contiguous non-AF DoD installations report as separate EPCRA facilities, per DoD guidance.

7.3.5.1. AF EPCRA reporting does not include either on-site commercial activities that are not operating in support of DoD, or activities at non-contiguous contractor's locations (**Note:** Contiguous or adjacent DoD installations that are part of a Joint Base and under a lead military service report as one EPCRA facility).

7.3.5.2. A facility must have 10 or more full-time employees working in support of DoD operations, to be required to report under EPCRA Section 313. **(T-0)**. For this calculation, a "full-time employee" is the equivalent of 2,000 work-hours per year. If the total hours worked by all on-site employees is 20,000 hours or more, the installation meets the "10 or more full-time employees" criterion. The calculation includes all hours worked by all DoD employees and contractors, including part-time personnel, and regardless of where the employees work on-site or whether their duties involve TRI chemicals.

7.3.5.3. AF installations that have fewer than 20,000 hours worked on-site during a particular calendar year are only required to document the calculation of employee hours. No other Section 313 calculations or reporting is required by a facility for any calendar year during which that facility has less than 20,000 hours worked on-site. AF installations

that meet the employee criterion must apply Section 313 thresholds to determine which chemicals require reporting.

7.3.6. Range Reporting: AF policy is that a range facility consists of all targets within the range boundary, even though target sets can be separated by many miles. This approach reflects the way AF range managers track expenditures, which is by range, rather than by target sets within a range complex.

7.3.6.1. Ranges within AF installations (e.g., small arms ranges that are enclosed or outdoors), and those ranges immediately adjacent to the installation boundary (e.g., contiguous property) and under AF ownership, will be considered as part of the single installation facility and included in the threshold and reporting calculations of the host-installation for EPCRA Section 313 TRI reporting. **(T-0)**. Report range-related releases on a separate, additional Form R.

7.3.6.2. Outlying or non-contiguous ranges, located at some distance from an AF installation and with non-AF property between the range and installation, require a separate evaluation for applicability under 40 CFR Part 370, *Hazardous Chemical Release Reporting: Community Right-to-Know*. Each such outlying or non-contiguous range will separately apply the “fence line-to-fence line” definition of “facility” in developing threshold calculations and data to report on Form R. **(T-0)**.

7.3.6.3. Large outlying ranges with target items, maintenance and operations buildings, and/or target setup and de-mil operations, are expected to meet the 10 full-time equivalent (FTE) on-site employees, or equivalent threshold, in addition to having “structures” on-site, and so will be considered single facilities under EPCRA required to report all releases from the entire contiguous AF property. All range related personnel, including off-site Range related managers and schedulers, etc., that are not actively present on a day-to-day basis performing activities at the site, are included in the FTE calculation. **(T-0)**.

7.3.6.4. Smaller outlying ranges may be below the 10 FTE employee threshold, or may lack the buildings, equipment, and targets that would make the range a facility covered by EPCRA Section 313.

WARREN D. BERRY, Lieutenant General, USAF
DCS/Logistics, Engineering, and Force Protection

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

- AFPD 32-70, *Environmental Considerations in Air Force Programs and Activities*, 30 July 2018
- AFPD 90-8, *Environment, Safety, & Occupational Health Management and Risk Management*, 14 March 2017
- AFI 10-403, *Deployment Planning and Execution*, 20 September 2012
- AFI 10-404, *Base Support and Expeditionary (BAS&E) Site Planning*, 24 July 2019
- AFI 10-2501, *Air Force Emergency Management Program*, 19 April 2016
- AFI 23-101, *Air Force Materiel Management*, 12 December 2016
- AFI 23-201, *Fuels Management*, 20 June 2014
- AFI 23-204, *Organizational Fuel Tanks*, 24 July 2012
- AFI 24-602V2, *Cargo Movement*, 12 June 2019
- AFI 25-201, *Intra-Service, Intra-Agency, and Inter-Agency Support Agreements Procedures*, 18 October 2013
- AFI 32-1001, *Civil Engineer Operations*, 04 October 2019
- AFI 32-1015, *Integrated Installation Planning*, 30 July 2019
- AFI 32-1067, *Water and Fuel Systems*, 04 February 2015
- AFI 32-6001, *Family Housing Management*, 21 August 2006
- AFI 32-7001, *Environmental Management*, 23 August 2019
- AFI 32-7091, *Environmental Management Outside the United States*, 18 March 2016
- AFI 33-360, *Publications and Forms Management*, 01 December 2015
- AFI 41-201, *Managing Clinical Engineering Programs*, 10 October 2017
- AFI 48-144, *Drinking Water Surveillance Program*, 21 October 2014
- AFI 48-145, *Occupational and Environmental Health Program*, 11 July 2018
- AFI 48-148, *Ionizing Radiation Protection*, 20 November 2014
- AFI 51-301, *Civil Litigation*, 02 October 2018
- AFI 63-101/20-101, *Integrated Life Cycle Management*, 09 May 2017
- AFI 63-138, *Acquisition of Services*, 30 September 2019
- AFI 64-117, *Government Purchase Card Program*, 22 June 2018
- AFI 65-106, *Appropriated Fund Support of Morale, Welfare, and Recreation (MWR) and Other Nonappropriated Fund Instrumentalities (NAFIS)*, 15 January 2019
- AFI 65-601, Volume 1, *Budget Guidance and Procedures*, 24 October 2018

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

AFI 90-801, *Environment, Safety, and Occupational Health Councils*, 4 August 2016

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

AFI 91-108, *Air Force Nuclear Weapons Intrinsic Radiation & 91(B) Radioactive Material Safety Program*, 12 February 2015

AFJMAN 23-209 (DLAI 4145.11), *Storage and Handling of Hazardous Materials*, 13 January 1999

AFMAN 10-2502, *Air Force Incident Management System Standards and Procedures*, 13 September 2018

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

AFMAN 21-201, *Munitions Management*, 26 March 2019

AFMAN 23-122, *Materiel Management Procedures*, 14 December 2016

AFMAN 24-204, *Preparing Hazardous Materials for Military Air Shipments*, 13 July 2017

AFMAN 24-210, *Packaging of Hazardous Material*, 21 April 2015

AFMAN 32-1061, *Providing Utilities to U.S. Air Force Installations*, 16 July 2019

AFMAN 33-363, *Management of Records*, 01 March 2008

AFMAN 40-201, *Radioactive Materials (RAM) Management*, 29 March 2019

AFMAN 65-605V1, *Budget Guidance and Technical Procedures*, 16 August 2012

AFMAN 91-201, *Explosives Safety Standards*, 21 March 2017

AFMAN 91-203, *Air Force Occupational Safety, Fire, and Health Standards*, 11 December 2018

AFH 10-222V4, *Environmental Considerations for Overseas Contingency Operations*, 1 September 2012

AFH 23-123V1, *Materiel Management Reference Information*, 8 August 2013

TO 00-5-1, *Air Force Technical Order System*, 14 June 2016

FED-STD-313F, *Material Safety Data, Transportation Data and Disposal Data for Hazardous Materials Furnished to Government Activities*, 12 October 2018

DFARS, Subpart 223.3, *Hazardous Material Identification and Material Safety Data*, 09 December 2005

Federal Acquisition Regulation (FAR) Clause 52.223-3, *Hazardous Material Identification and Material Safety Data*

FAR Clause 52.223-5, *Pollution Prevention and Right-to-Know Information*.

FAR Clause 52.223-19, *Compliance with Environmental Management Systems*.

FAR AF Supplement Clause 5352.223-9001, *Health and Safety on Government Installations (not applicable to ANG)*.

FAR Clause 52.223-7, *Notice of Radioactive Materials*.

Air Force Records Information Management System (AFRIMS) *Records Disposition Schedule (RDS)* located at <https://www.my.af.mil/afrims/afrims/afrims/rims.cfm>

Armed Forces Pest Management Board Technical Guide Number 4, *Disinsection of Military Aircraft*, July 2018

DFAS/DE 7010.5-R, *Direct, Refund, Reimbursement, and Receivable Transactions at Base Level*

DoDM 4160.21, *Defense Materiel Disposition*, 22 October 2015

DoDM 4715.26, *DoD Military Munitions Rule Implementation Procedures*, 25 April 2017

DoDM 6055.09, Vol 1-8, *DoD Ammunition and Explosives Safety Standards*, 29 February 2008

DoDI 4140.62, *Material Potentially Presenting an Explosive Hazard*, 20 August 2015

DoDI 4715.05, *Environmental Compliance at Installations Outside the United States*, 1 November 2013

DoDI 4715.05-G, *Overseas Environmental Baseline Guidance Document*, 1 May 2007

DoDI 4715.06, *Environmental Compliance in the United States*, 4 May 2015

DoDI 4715.14, *Operational Range Assessments*, 15 November 2018

DoDI 4715.15, *Environmental Quality Systems*, 17 April 2017

DoDI 4715.17, *Environmental Management Systems*, 15 April 2009

DoDI 4715.18, *Emerging Chemicals (ECs) of Environmental Concern*, 02 July 2019

DoDI 4715.23, *Integrated Recycling and Solid Waste Management*, 24 October 2016

DoDI 6050.05, *DoD Hazard Communication (HAZCOM) Program*, 26 February 2019

DTR 4500.9-R, *The Defense Transportation Regulations, Part II*, "Cargo Movement, November 2018," Jun 2019

DoD 7000.14-R, *Financial Management Regulations* (includes DOD 7000.14-R Volume 4, *DOD Financial Management Regulation Accounting Policies*; DOD 7000.14-R Volume 5, *DOD Financial Management Regulation Disbursing Policies*; DOD 7000.14-R Volume 11A, *DOD Financial Management Regulation Reimbursable Operations Policy*; DOD 7000.14-R Volume 12, *DOD Financial Management Regulation Special Accounts, Funds and Programs Policies*)

DoD Policy Memorandum, *Spent Blast Media (SBM) Management Policy*, 10 July 2019

E.O. 13834, *Efficient Federal Operations*, 17 May 2018

HAF Mission Directive (HAFMD) 1-14, *General Counsel and The Judge Advocate General*, 29 December 2016

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

PL 102-386, *The Federal Facility Compliance Act*

PL 99-499, *Superfund Amendments and Reauthorization Act*

5 USC § 552a, *The Privacy Act of 1974*

10 USC § 2208, *Working-capital funds*

10 USC § 2577, *Disposal of Recyclable Materials*

10 USC § 2692, *Storage, Treatment, and Disposal of Nondefense Toxic and Hazardous Materials*

10 USC § 2701, *Environmental Restoration Program*

10 USC § 2706, *Annual Reports to Congress*

10 USC § 2801, *Military Construction, Definitions*

15 USC §§ 2601-2692, *Toxic Substances Control Act (TSCA)*

15 USC §§ 2641-2656, *The Asbestos Hazard Emergency Response Act*

15 USC § 2681, *Title IV of the Toxic Substances Control Act, Lead Exposure Reduction*

20 USC § 4011, *Asbestos School Hazard Abatement Reauthorization Act*

29 USC § 651-678, *Occupational Safety and Health Act*

33 USC §§ 1251–1386, *The Federal Water Pollution Control Act*

40 USC §§ 521-529, *Federal Property and Administrative Services, Use of Property*

40 USC §§ 541-559, *Federal Property and Administrative Services, Disposing of Property*

42 USC §§ 13101-13109, *Pollution Prevention Act*

42 USC §§ 300f – 300j-26, *The Safe Drinking Water Act*

42 USC §§ 2011-2297, *Development and Control of Atomic Energy*

42 USC §§ 4851-4856, *Residential Lead-based Paint Hazard Reduction*

42 USC §§ 6901-6992, *Resource Conservation and Recovery Act (RCRA)*

42 USC § 6922(b), *Standards Applicable to Generators of Hazardous Waste, Waste Minimization*

42 USC § 6961, *Application of Federal, State, and local law to Federal facilities*

42 USC §§ 7401-7671q, *Clean Air Act (CAA)*

42 USC § 7418, *Control of Pollution from Federal Facilities*

42 USC § 7418(d), *Vehicles Operated on Federal Installations*

42 USC § 7479, *Prevention of Significant Deterioration of Air Quality, Definitions*

42 USC §§ 9601-9675, *Comprehensive Environmental Response, Compensation and Liability Act (CERCLA)*

42 USC §§ 11001-11050, *Emergency Planning and Community Right-to-Know Act (EPCRA)*

49 USC §§ 5101-5128, *Hazardous Materials Transportation Act*

7 CFR **Part 330**, *Federal Plant Pest Regulations*

- 9 CFR **Part 94.5**, *Regulation of certain garbage*
- 29 CFR **Part 1910**, *Occupational Safety and Health Standards*
- 29 CFR **Part 1910.1200**, *Hazard Communication*
- 29 CFR **Part 1910.1450**, *Occupational Exposure to Hazardous Chemicals in Laboratories*
- 29 CFR **Part 1926**, *Safety and Health Regulations for Construction*
- 29 CFR **Part 1926.1101**, *Toxic and Hazardous Substances: Asbestos*
- 29 CFR **Part 1926.62**, *Occupational Health and Environmental Controls: Lead*
- 32 CFR **Part 172**, *Disposition of Proceeds from DoD Sales of Surplus Personal Property*
- 32 CFR **Part 172.5**, *Procedures, Disposition of Proceeds from DoD Sales of Surplus Property*
- 32 CFR **Part 187**, *Environmental Effects Abroad of Major Department of Defense Actions*
- 32 CFR **Part 989**, *Environmental Impact Analysis Process (EIAP)*
- 40 CFR **Parts 50-98**, *Air Programs*
- 40 CFR **Part 51**, *Requirements for Preparation, Adoption, and Submittal of Implementation Plans*
- 40 CFR **Part 51**, *Subpart A, Air Emissions Reporting Requirements*
- 40 CFR **Part 51**, *Subpart H, Prevention of Air Pollution Emergency Episodes*
- 40 CFR **Part 51**, *Subpart I, Review of New Sources and Modifications*
- 40 CFR **Part 51**, *Subpart W, Determining Conformity of General Federal Actions to State or Federal Implementation Plans*
- 40 CFR **Part 52**, *Approval and Promulgation of Implementation Plans*
- 40 CFR **Part 58**, *Ambient Air Quality Surveillance*
- 40 CFR **Part 60**, *Standards of Performance for New Stationary Sources*
- 40 CFR **Part 61**, *National Emission Standards for Hazardous Air Pollutants*
- 40 CFR **Part 61**, *Subpart M: National Emissions Standards for Asbestos*
- 40 CFR **Part 61.150**, *Standard for Waste Disposal for Manufacturing, Fabricating, Demolition, Renovation, and Spraying Operations*
- 40 CFR **Part 63**, *National Emission Standards for Hazardous Air Pollutants for Source Categories*
- 40 CFR **Part 68**, *Chemical Accident Prevention Provisions*
- 40 CFR **Part 70**, *State Operating Permit Programs*
- 40 CFR **Part 71**, *Federal Operating Permit Programs*
- 40 CFR **Part 80**, *Regulation of Fuels and Fuel Additives*
- 40 CFR **Part 82**, *Protection of Stratospheric Ozone*
- 40 CFR, **Part 82**, *Subpart B, Servicing of Motor Vehicle Air Conditioners*

40 CFR, **Part 82**, *Subpart F, Recycling and Emissions Reduction*

40 CFR, **Part 82**, *Subpart G, Significant New Alternatives Policy Program*

40 CFR **Part 82.166**, *Reporting and recordkeeping requirements for leak repair*

40 CFR **Part 85**, *Control of Air Pollution from Mobile Sources*

40 CFR **Part 93**, *Determining Conformity of Federal Actions to State or Federal Implementation Plans*

40 CFR **Part 93**, *Subpart B, Determining Conformity of General Federal Actions to State or Federal Implementation Plans*

40 CFR **Part 93.153(b) and (c)**, *Conformity applicability*

40 CFR **Part 93.154**, *Federal agency conformity responsibility*

40 CFR **Part 98**, *Mandatory Greenhouse Gas Reporting*

40 CFR Part 112, *Oil Pollution Prevention*

40 CFR Parts 239-282, *Resource Conservation and Recovery Act (RCRA)*

40 CFR Parts 239-258, *Non-hazardous Waste Program*

40 CFR Part 239, *Requirements for State Permit Program Determination of Adequacy*

40 CFR Part 243, *Guidelines for the Storage and Collection of Residential, Commercial, and Institutional Solid Waste*

40 CFR Part 246, *Source Separation for Materials Recovery Guidelines*

40 CFR Part 257, *Criteria for Classification of Solid Waste Disposal Facilities and Practices*

40 CFR Part 258, *Criteria for Municipal Solid Waste Landfills*

40 CFR Part 258.29, *Criteria for municipal solid waste landfills: recordkeeping requirements.*

40 CFR Parts 260-273, *Hazardous Waste Program*

40 CFR Part 260, *Hazardous Waste Management System, General*

40 CFR Parts 260-266, *Hazardous Waste Management System*

40 CFR Part 261, *Identification and Listing of Hazardous Waste*

40 CFR Part 261.2(c), *Definition of solid waste*

40 CFR Part 261.6, *Requirements for recyclable materials*

40 CFR Part 261, *Subpart C, Characteristics of Hazardous Waste*

40 CFR, Part 261.31, *Hazardous wastes from non-specific sources*

40 CFR, Part 261.32, *Hazardous wastes from specific sources*

40 CFR, Part 261.33, *Discarded commercial chemical products, off-specification species, container residues, and spill residues thereof*

40 CFR Part 262, *Standards Applicable to Generators of Hazardous Waste*

40 CFR 262, *Subpart A: General, Hazardous Waste Determination and Recordkeeping*

- 40 CFR Part 262, Subpart B: *Manifest Requirements Applicable to Small and Large Quantity Generators*
- 40 CFR Part 262, Subpart D: *Recordkeeping and Reporting Applicable to Small and Large Quantity Generators*
- 40 CFR Part 264, *Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities*
- 40 CFR Part 264, Subpart B, *General Facility Standards*
- 40 CFR Part 265, *Interim Status Standards for Owners and Operators of Hazardous Waste Treatment, Storage, and Disposal Facilities*
- 40 CFR 265, Subpart B, *General Facility Standards*
- 40 CFR **Part 266**, *Standards for The Management of Specific Hazardous Wastes and Specific Types of Hazardous Waste Management Facilities*
- 40 CFR **Part 266**, Subpart M: *Military Munitions*
- 40 CFR **Part 266**, Subpart N: *Conditional Exemption for Low-Level Mixed Waste Storage, Treatment, Transportation and Disposal*
- 40 CFR **Part 266**, Subpart P: *Hazardous Waste Pharmaceuticals*
- 40 CFR Part 270, *EPA Administered Permit Programs: The Hazardous Waste Permit Program*
- 40 CFR Part 273, *Standards for Universal Waste Management*
- 40 CFR Part 280, *Technical Standards and Corrective Action Requirements for Owners and Operators of Underground Storage Tanks*
- 40 CFR **Part 300**, *National Oil and Hazardous Substances Pollution Contingency Plan*
- 40 CFR **Part 302**, *Designation, Reportable Quantities, and Notification*
- 40 CFR **Parts 350-372**, *Superfund, Emergency Planning, and Community Right-To-Know Programs*
- 40 CFR **Part 355**, *Emergency Planning and Notification*
- 40 CFR Part 370, *Hazardous Chemical Reporting: Community Right-To-Know*
- 40 CFR Part 445, Subpart B, *Landfills Point Source Category, RCRA Subtitle D Non-Hazardous Waste Landfill*
- 40 CFR Parts 700-799, *Toxic Substances Control Act*
- 40 CFR Part 745, *Lead-Based Paint Poisoning Prevention in Certain Residential Structures*
- 40 CFR Part 745, Subpart E, *Residential Property Renovation*
- 40 CFR Part 745.82(a), *Applicability*
- 40 CFR Part 745.84, *Information distribution requirements*
- 40 CFR Part 745.85, *Work practice standards*

40 CFR Part 745, Subpart F, *Disclosure of Known Lead-Based Paint and/or Lead-Based Paint Hazards Upon Sale or Lease of Residential Property*

40 CFR Part 745, Subpart L, *Lead-Based Paint Activities*

40 CFR Part 761, *Polychlorinated Biphenyls (PCBs) Manufacturing, Processing, Distribution in Commerce, and Use Prohibitions*

40 CFR Part 761, Subpart D, *Storage and Disposal*

40 CFR Part 761, Subpart K, *PCB Waste Disposal Records and Reports*

40 CFR Part 761.180(a), *Records and Monitoring: PCBs and PCB Items in Service or Projected for Disposal*

40 CFR Part 763, *Asbestos*

40 CFR Part 1068, *General Compliance Provisions for Highway, Stationary, and Non-road Engine Programs*

40 CFR Part 1068, Subpart C: *Exemptions and Exclusions*

40 CFR Parts 1500-1508, *Council on Environmental Quality*

41 CFR Part 102, *Federal Management Regulation*

41 CFR Part 102-38, *Sale of Personnel Property*

49 CFR Parts 171-180, *Hazardous Materials Regulations*

Guide to the Mandatory Greenhouse Gas Reporting Rule and Greenhouse Gas Tailoring Rule, May 2019

Prescribed Forms

AF Form 4434, *Vehicle Inspection and Maintenance (I&M) Program Self Certification*

Adopted Forms

AF Form 9, *Request for Purchase*

AF Technical Order Form 22, *Technical Manual (TM) Change Recommendation and Reply*

AF Form 847, *Recommendation for Change of Publication*

AF Form 1098, *Special Task Certification and Recurring Training*

AF Form 55, *Employee Safety and Health Record*

DD Form 1348-1A, *Issue Release/Receipt Document*

DLA Form 2511, *Hazardous Waste Profile Sheet*

EPA Form 8700-22, *Uniform Hazardous Waste Manifest*

Abbreviations and Acronyms

AFCEC—Air Force Civil Engineer Center

AAFES—Army and Air Force Exchange Service

AEI—Air Emissions Inventory
AFI—Air Force Instruction
AFIMSC—Air Force Installation and Mission Support Center
AFWCF—Air Force Working Capital Fund
AFIT—Air Force Institute of Technology
AFJMAN—Air Force Joint Manual
AFMAN—Air Force Manual
AFMSA—Air Force Medical Support Agency
AFPD—Air Force Policy Directive
AFR—Air Force Reserve
AFRC—Air Force Reserve Command
AFRRAD—Air Force Radioactive Recycling and Disposal Office
AFRIMS—Air Force Records Information Management System
ANG—Air National Guard
ANGRC—Air National Guard Readiness Center
APIMS—Air Program Information Management System
AQ—Acquisition
BCE—Base Civil Engineer
BEE—Bioenvironmental Engineer
CAA—Clean Air Act
C&D—Construction and Demolition
CE—Civil Engineer
CEIE—Civil Engineer-Installation Management Flight, Environmental Element
CEQ—Council on Environmental Quality
CERCLA—Comprehensive Environmental Response, Compensation, and Liability Act
CFC—Chlorofluorocarbons
CFR—Code of Federal Regulations
CFT—Cross Functional Team
CO—Carbon Monoxide
DERC—Discrete Emission Reduction Credit
DEPARC—Defense Environmental Programs Annual Report to Congress
DERA—Defense Environmental Restoration Account

DERP—Defense Environmental Restoration Program
DFAS—Defense Finance and Accounting Service
DLA—Defense Logistics Agencies
DoD—Department of Defense
DoDI—DoD Instruction
DoDM—DoD Manual
DoT—Department of Transportation
DRU—Direct Reporting Unit
DTR—Defense Transportation Regulations
EA—Enforcement Action
ECs—Emerging Chemicals
ECARS—Employee-Vehicle Certification and Reporting System
EIAP—Environmental Impact Analysis Process
EM—Environmental Management
EMS—Environmental Management System
E.O.—Executive Order
EPA—Environmental Protection Agency
EPCRA—Emergency Planning and Community Right-to-Know Act
ERC—Emission Reduction Credit
ESOH—Environmental, Safety, and Occupational Health
ESOHC—Environment, Safety and Occupational Health Council
ESOH SC—Environment, Safety, and Occupational Health Steering Committee
EESOH-MIS—Enterprise, Environmental, Safety, and Occupational Health-Management Information System
FAR—Federal Acquisition Regulation
FGS—Final Governing Standards
FTE—Full-Time Equivalent
FY—Fiscal Year
GenComm—Generator Communication System
GPC—Government Purchase Card
GOCO—Government-Owned, Contractor-Operated
GSA—General Services Administration
GSU—Geographically Separated Unit

HAF—Headquarters Air Force
HAP—Hazardous Air Pollutant
HAZCOM—Hazard Communication
HAZMAT—Hazardous Material
HCFC—Hydrochlorofluorocarbons
HMMP—Hazardous Materials Management Process
HTA—HAZMAT Tracking Activity
HW—Hazardous Waste
HWAS—Hazardous Waste Accumulation Site
HWMP—Hazardous Waste Management Plan
I&M—Inspection and Maintenance
IDO—Installation Deployment Officers
ISWM—Integrated Solid Waste Management
JA—Judge Advocate
LBP—Lead-Based Paint
LRS—Logistics Readiness Squadron
MAJCOM—Major Command
MICT—Management Internal Control Tool
MILCON—Military Construction
MR—Military Munitions Rule
MSW—Municipal Solid Waste
MW—Mixed Waste
MWR—Morale, Welfare, and Recreation
NAAQS—National Ambient Air Quality Standards
NEPA—National Environmental Policy Act
NESHAP—National Emission Standard for Hazardous Air Pollutants
NO₂—Nitrogen Dioxide
NO_x—Nitrogen Oxides
NSE—National Security Exemption
NSR—New Source Review
ODS—Ozone Depleting Substance
O&M—Operations and Maintenance

O₃—Ozone
ODS—Ozone Depleting Substances
OEBGD—Overseas Environmental Baseline Guidance Document
OPR—Office of Primary Responsibility
OSHA—Occupational Safety and Health Administration
NSN—National Stock Number
Pb—Lead
PCB—Polychlorinated Biphenyl
PL—Public Law
ppm—parts per million
PSD—Prevention of Significant Deterioration
PTE—Potential-To-Emit
QRP—Qualified Recycling Program
RAM—Radioactive Material
RCRA—Resource Conservation and Recovery Act
RegAF—Regular Air Force
RQ—Reportable Quantity
RW—Radioactive Waste
SAF—Secretary of the Air Force
SBM—Spent Blast Media
SDS—Safety Data Sheet
SJA—Staff Judge Advocate
SME—Subject Matter Expert
SO₂—Sulfur Dioxide
SW—Solid Waste
TO—Technical Order
TRI—Toxic Release Inventory
TSCA—Toxic Substances Control Act
TSDF—Treatment, Storage, and Disposal Facility
VOC—Volatile Organic Compound
UCC—Unified Combatant Command
UDM—Unit Deployment Manager

USAF—United States Air Force

U.S.—United States

USC—United States Code

UW—Universal Waste

WAP—Waste Analysis Plan

Terms

Acute HW—Waste that EPA has determined to be so dangerous in small amounts (as listed in 40 CFR Part 261.33(e) in the P and U listed items) that they are regulated the same way, as are large amounts of other HW.

Air Force Working Capital Fund (AFWCF)—Air Force Working Capital Fund (AFWCF) [formerly Defense Business Operations Fund (DBOF)] was established on 11 Dec 1996 through the restructuring of the DBOF into individual component working capital funds. AFWCF activities sell goods and services to a wide range of customers, including DoD operating forces, Air Force activities, other US government activities and foreign military sales customers. The AFWCF activity groups include Depot Maintenance, Supply Management, and Information Services.

Air Pollutant—Any air pollution agent or combination of such agents, including any physical, chemical, biological, radioactive (including source material, special nuclear material and byproduct material) substances or matter which emitted into or otherwise enters the ambient air. Such term includes any precursors to the formation of any air pollutant, to the extent the Administrator has identified such precursor or precursors for the particular purpose for which the term “air pollutant” is used.

Air Program Information Management System (APIMS)—The Air Force information system for air quality permit management, air emission inventory, vehicle inspection & maintenance certification, and air emission reporting.

Air Quality Standards—As prescribed by regulations, the level of pollutants that may not be exceeded during a specific time in a defined area.

Attainment Area—An area considered to have air quality as good as or better than the NAAQS as defined in the CAA. An area may be an attainment area for one pollutant and a nonattainment area for others.

Blanket Authorization—The blanket authorization approves the use of a particular unit of issue of an HAZMAT independent of process. Each of the Authorizing Offices (CE, SE, and BE) will make an independent determination of whether or not to provide a blanket authorization for a specific HAZMAT and HAZMAT container size. Blanket authorizations must identify specific material stock numbers.

Capacitor—A device for accumulating and holding a charge of electricity and consisting of conducting surfaces separated by a dielectric. Types of capacitors are as follows: (1) Small capacitor means a capacitor which contains less than 1.36 kg (3 lbs.) of dielectric fluid. The following assumptions may be used if the actual weight of the dielectric fluid is unknown. A capacitor whose total volume is less than 1,639 cubic centimeters (100 cubic inches) may be considered to contain less than 1.36 kgs (3 lbs.) of dielectric fluid and a capacitor whose total

volume is more than 3,278 cubic centimeters (200 cubic inches) must be considered to contain more than 1.36 kg (3 lbs.) of dielectric fluid. A capacitor whose volume is between 1,639 and 3,278 cubic centimeters may be considered to contain less than 1.36 kg (3 lbs.) of dielectric fluid if the total weight of the capacitor is less than 4.08 kg (9 lbs.). (2) Large high voltage capacitor means a capacitor which contains 1.36 kg (3 lbs.) or more of dielectric fluid and which operates at 2,000 volts (a.c. or d.c.) or above. (3) Large low voltage capacitor means a capacitor which contains 1.36 kg (3 lbs.) or more of dielectric fluid and which operates below 2,000 volts (a.c. or d.c.).

Characteristic HW—A waste which meets the definition of the characteristic of ignitability, corrosivity, reactivity, or toxicity as specified in 40 CFR Part 261.

Civil Engineer—Installation Management Flight, Environmental Element (CEIE)—For the purpose of this AFMAN, this refers to the environmental function embedded in Base Civil Engineering. This used to be under the Asset Management Flight, but AF Civil Engineer is transitioning to new name. This also applies to Air Reserve Components (ANG and AFRC) Environmental Management Office, referred to as Installation Environmental Element in this manual. **Note:** At some installations, Asset Management Flight under CE might still remain with the environmental function under it.

Chlorofluorocarbons (CFCs)—Class of compounds of carbon, hydrogen, chlorine, and fluorine, typically gases used in refrigerants and aerosol propellants. Considered harmful to the ozone layer in the earth's atmosphere owing to the release of chlorine atoms on exposure to ultraviolet radiation.

Conditionally Exempt Small Quantity Generator (CESQG)—These are entities (installations) which generate in a calendar month: a) no more than 220 lbs. of non-acute HW, b) no more than 220 lbs. of acute spill cleanup residue, and c) no more than 2.2 lbs. of other acute HW as specified in 40 CFR Part 262.

Conformity—Conformity is the multi-step process used to determine and document whether a proposed federal action meets the requirements of the General Conformity rule. There are two main components to the overall process: an applicability analysis to determine whether a conformity determination is required and, if it is, a Conformity determination to determine whether the action conforms to the SIP.

Criteria Pollutant—Air pollutants for which NAAQS have been established. Criteria pollutants include nitrogen dioxide (NO₂), sulfur dioxide (SO₂), carbon monoxide (CO), ozone (O₃), particulate matter (PM-10 & PM2.5) and lead (Pb).

Data Steward—The function charged with centrally creating and managing shared records and associated data in EESOH-MIS. Stewarded areas include stock numbers, safety data sheets, chemicals, manufacturers, and other commonly-used shared data in EESOH-MIS.

Defense Working Capital Fund—The management of working capital fund, or industrial, commercial, and support-type activities by the Secretary of Defense through separate accounting, reporting, and auditing. These activities include the Defense Finance and Accounting Service (DFAS), Defense Commissary Agency and Defense Reutilization and Marketing Service. Proceeds are routinely used to offset customer costs.

Department of Transportation—Key regulations governing the transportation/movement of hazardous material. Current U.S. Department of Transportation (DOT) regulations require initial and recurrent training of all employees who perform work functions covered by 49 CFR Parts 171-180. Any employee whose work directly affects hazardous materials transportation safety (including HW shipped off-base) is required to have training. The Office of Hazardous Materials Safety has developed training modules that meet the requirements for general awareness training as prescribed in 49 CFR Part 172, Subpart H. Requires training to include HW manifest training available on its web site (<https://www.phmsa.dot.gov/training/hazmat/training-modules>).

Defense Transportation Regulation (DTR)—Set of regulations developed for military movement of materiel which prescribe policies and procedures and assigns responsibilities for performing traffic management functions initiated or sponsored by DoD activities, to include the transportation and movement of materiel. It also prescribes standard data elements, codes, formats, documents, forms, rules, methods, and procedures required by DOD Components, other U.S. Government Agencies/civil authorities, and users of the Canada-U.S. Integrated Lines of Communication in the transportation and movement of materiel to, within, and outside the Defense Transportation System. DTR procedures apply to the Army, Navy, AF, Marine Corps, Defense Logistics Agency (DLA), Defense Contract Management Agency (DCMA), Coast Guard, General Services Administration (GSA), United States Transportation Command (USTRANSCOM) and its Transportation Component Commands (TCCs), and other activities/Agencies using the Defense Transportation System. In some cases, when moving materiel by commercial carriers, only selected procedures and data elements are used. There are no exclusions from these data/documentation requirements for shipments entering the Defense Transportation System. Service or agency regulations cover some shipments that might logically fit the description of movement in the Defense Transportation System.

Diversion Rate—The total amount of non-hazardous SW, including construction and demolition debris that is diverted from entering a disposal facility through composting, mulching, recycling, reuse, and donation.

eDASH—An online Microsoft SharePoint® tool is the central repository and information sharing for AF enterprise-wide environmental programs supporting installations and MAJCOMs. Primary one-stop source for environmental procedures, non-directive guidance and best practices. It provides the AF Civil Engineer Center to ability to establish standard procedures and performance standards for more efficient and effective information management and exchange, communication and program reviews for environmental and sustainability programs at all levels. Pages and tools contained within eDASH function as an electronic EMS manual and performance tracker to ensure conformance and mission effectiveness (if maintained as described in this manual). Finally, eDASH provides AF SMEs the ability to provide online technical support to the installations and use standard tools for carrying out data collection and reporting from the installations to reduce the burden of manual data collection tasks on the installations. As of the date of this publication, this is the link to eDASH: (<https://cs2.eis.af.mil/sites/10040/>)

Emerging Chemicals (ECs) of Environmental Concern—Chemicals relevant to the DoD that are characterized by a perceived or real threat to human health or the environment and that have new or changing toxicity values or new or changing human health or environmental regulatory standards. Changes may be due to new science discoveries, detection capabilities, or exposure pathways.

Emission—An emission is any release into the atmosphere of an air pollutant as defined in the CAA Amendments of 1990 Section 302 (g). Emissions can be released from boilers, generators, motor vehicles and air fleet, degreasing operations, woodworking and welding, depainting and surface coating operations, etc.

Emissions Inventory—A detailed listing, by source and type, of the quantity of air pollutants emitted into the atmosphere.

Emission Reduction Credit (ERC)—Emission reduction credits are a novel form of property for emissions trading purposes. ERCs only exist when created in accordance with a system to establish, bank, and trade the ERCs under a state or local jurisdiction.

Employee-Vehicle Certification and Reporting System (ECARS)—An automated system, a module of the APIMS, used by § 118 of the CAA affected facilities to document compliance with vehicle emissions Inspection and Maintenance requirements under § 118 of the CAA.

Enforcement Action—Actions taken by regulators to obtain compliance with environmental laws, rules, regulations, or agreements and/or obtain penalties for violations.

Enterprise Environmental, Safety, and Occupational Health Management Information System (EESOH-MIS)—This is the standardized AF HAZMAT and HW tracking & reporting system.

Environmental Impact Analysis Process (EIAP)—The EIAP provides procedures for environmental impact analysis both within the U.S. and abroad. EIAP deals primarily with environmental impact analysis under the authority of the National Environmental Policy Act of 1969 (NEPA). The EIAP procedures are essential to achieve and maintain compliance with NEPA and the Council on Environmental Quality (CEQ) Regulations for Implementing the Procedural Provisions of the NEPA. To comply with NEPA and complete the EIAP, the CEQ Regulations and the EIAP Regulations are used together.

Environmental Inspection Process—Internal AF environmental self-inspection process described in AFI 32-7001, carried out through the Wing Inspector General Commander's Inspection Program, along with environmental program and management system assessments conducted as part of the Inspection General unit effectiveness inspections in accordance with AFI 90-201.

EPA Waste Code—An EPA HW number listed in 40 CFR Part 261.

Emergency Planning and Community Right-to-Know Act (EPCRA)—42 USC §§ 11001-11050, *EPCRA* establishes requirements for federal, state and local governments, Indian tribes, and industry regarding emergency planning and “Community Right-to-Know” reporting on hazardous and toxic chemicals. The Community Right-to-Know provisions help increase public's knowledge and access to information on chemicals at individual facilities, their uses, and releases into the environment. States and communities, working with facilities, including state and local emergency responders working with military installations, can use the information to improve chemical safety and protect public health and the environment. Regulations implementing 42 USC §§ 11001-11050, *EPCRA* are codified in 40 CFR **Parts 350-372**. The chemicals covered by each of the sections are different, as are the quantities that trigger reporting.

Extremely Hazardous Substances—Compounds referred to in section III of 42 USC §§ 11001-11050, *EPCRA*, which are found at 40 CFR **Part 355**, *Emergency Planning and Notification*.

F3875 Budget Clearing Account (Suspense)—Defined in Chapter 9 of Volume 5 and Chapter 1 of Volume 12 of DoD 7000.14-R, the proceeds from the sale of recyclable materials will be deposited in an F3875 or equivalent account in accordance with DoD Comptroller guidance (as implemented by SAF/FM) and 32 CFR Part 172.5. 10 USC § 2577, limits the amount of funds that can be held at the end of any fiscal year to \$10 million. Excess funds are transferred to miscellaneous receipts of the Department of the Treasury. Additional documents and regulations on handling proceeds from sales, reimbursement transactions are AFI 65-601, Volume 1, *Budget Guidance and Procedures*; AFMAN 65-605, Volume 1, *Budget Guidance and Technical Procedures*; and DFAS/DE 7010.5-R, *Direct, Refund, Reimbursement, and Receivable Transactions at Base Level* (Section C.9.4.9). Monitor AFMAN 65-605, Volume 1, for latest AF process for handling QRP proceeds as it transitions away from use of F3875 treasury account. Per OSD Comptroller policy memo, *Treasury Account Symbols for Licensing of Intellectual Property and Recycling Activities*, 30 August 2019, collections of recycling proceeds from prior Fiscal Years must be transferred out by 31 March 2020. Instead installations will need to use/credit funds available for Operations and Maintenance in amounts sufficient to cover costs of operations, maintenance, and overhead for processing recyclable material, including cost of recycling equipment. Bases will consult their FM and AFCEC/CZ for new guidance, Air Force procedures, and latest threshold of funds that can be held at base level (FY20 NDAA Section 313, increased threshold for sending money back to the Treasury for proceeds from sale of recyclable materials from \$2 million to \$10 million for each installation).

Final Governing Standards (FGS)—A comprehensive set of country-specific provisions, typically technical limitations on effluent, discharges, etc., or a specific management practice developed in accordance with DoDI 4715.05.

Fluorescent light ballast—A device that electronically controls fluorescent light fixtures and that includes a capacitor containing 0.1 kg or less of dielectric fluid.

General Conformity—42 USC §§ 7401-7671q, CAA requires federal agencies to assure that their actions conform to applicable implementation plans for achieving and maintaining the NAAQS for criteria pollutants. Also, the CAA assigns primary oversight responsibility for conformity assurance directly on the agencies, not to the EPA or the states. Specifically, for there to be conformity, a federal action must not contribute to new violations of standards for ambient air quality, increase the frequency or severity of existing violations, or delay timely attainment of standards in the area of concern (e.g., a state or a smaller air quality region). EPA issued general conformity regulations (40 CFR **Part 93**, Subpart B) containing procedures and criteria for determining whether a proposed federal action would conform with state/EPA CAA implementation plans.

Generator—Under RCRA, any person, by site, whose act or process produces HW identified or listed in 40 CFR Part 261, or whose act first causes a HW to become subject to regulation (40 CFR Part 260). EPA and state environmental regulatory agencies typically consider an AF installation as the generator in connection with HW produced there. Therefore, in this AFMAN “HW generator” refers to the installation commander or designated representative of the installation.

Generating Activity—Each organization (including AF and non-AF tenants), shop, or work area using an operation or process that first generates a HW stream. The installation HWMP must identify generating activities.

Generator Communication (GenComm) System—DLA’s automated HW turn-in system, which is the preferred method of document submission to the DLA Disposition Services sites, particularly for HW or excess/expired hazardous materials being wasted. Use of GenComm to transfer HW turn-in documentation to DLA allows the military, using its automated HW tracking system (EESOH-MIS for the AF), to electronically (e-mail or upload) the Disposal Turn-In Document and HW Profile sheet and send it to the DLA Disposition Services site. DLA Disposition Service can then receive the waste and create a delivery order request for removal. Any automated system should meet the required communications standards in order for GenComm to interface with the DLA Disposition Services sites. The DLA Disposition Services GenComm capability can provide automated updates for disposal.

Government-owned, contractor operated (GOCO)—A facility that is owned by the government and operated under contract by a non-government, private firm.

Hazardous Air Pollutants—Those substances listed by EPA or states that have been identified as serious threats to human health or the environment.

Hazard Communication (HAZCOM)—The OSHA Hazard Communication Standard found in 29 CFR **Part 1910.1200** requires supervisors to inform the workers they supervise of the occupational safety and health hazards of chemicals used in the workplace and the proper procedures and equipment to use to minimize the risks of injury or sickness. Includes information on the hazardous chemicals to which they are potentially exposed, labels and other forms of warning on hazardous material containers, Safety Data Sheets, and training.

Hazardous Material (HAZMAT)—For purposes of this publication, the term HAZMAT includes all items that are covered under EPCRA or other applicable federal, state, local, or FGS (OEBGD where no FGS exist) tracking or reporting requirements; covered under 29 CFR **Part 1910.1200** or 29 CFR **Part 1910.1450**; Class I or Class II ODS. The term HAZMAT, as used in this AFMAN, excludes: Munitions, as defined by AFMAN 21-200, *Munitions and Missile Maintenance Management*; pharmaceuticals managed by an installation pharmacy or formulary; radioactive materials (RAM), as defined in and managed in accordance with AFMAN 40-201; and HW.

Hazardous Material Management Process (HMMP)—The process, described in this AFMAN, for coordinating and integrating the AF activities and infrastructure required for the ongoing identification, authorization and tracking of HAZMAT. HAZMAT management responsibilities are distributed across the core AF functions of Acquisition, Logistics Readiness (Materiel Management), Maintenance, CE, Surgeon General (SG), BE, Safety (SE), and Contracting. Each of these functions remains responsible for its inherent HAZMAT management policies, standards, and procedures. The HMMP coordinates these distributed functional activities and responsibilities to enable effective AF enterprise-wide HAZMAT management and oversight. To existing functional HAZMAT policies and procedures, the HMMP also adds specific cross-functional HMMP teaming, HAZMAT authorization, HAZMAT tracking, and ozone depleting substance (ODS) management requirements.

Hazardous Material Management Process (HMMP) teams—At HAF and installation levels, Environmental, Safety, and Occupational Health Councils (ESOHC) establish cross-functional HMMP teams to coordinate the inherent functional HAZMAT management responsibilities and to oversee the implementation of the specific additional requirements in this AFMAN.

HW—Any SW defined as a HW pursuant to 40 CFR Part 261 or authorized state or host nation rules and regulations.

Hazardous Waste Accumulation Site (HWAS)—A location where a generator may accumulate HW for a specific period of time without requiring a storage permit, or without having interim status. The allowed accumulation time is dependent on the generator's classification and includes 90 days for large quantity generators, 180 days for small quantity generators who transport their waste less than 200 miles for disposal, and 270 days for small quantity generators who transport their waste 200 miles or more for disposal. See 40 CFR Part 262.

HW Characterization—The identification, description, and quantification of a HW stream.

Hazardous Waste Management Plan (HWMP)—An installation-developed plan containing guidance for installation personnel on local procedures for managing HW and incorporating pollution prevention practices into HW management. The HWMP covers all tenants, including GOCO facilities that generate HW.

HW Profile Sheet—A document (DLA Form 2511 -- formerly Defense Reutilization and Marketing Service Form 1930), prescribed by DOD 4160.21-M that describes the physical and chemical properties of HW. Profile sheet or electronic equivalent required for turn-in of HW from installations to DLA-Disposition Services.

HAZMART—The term used for the location, organization, or function that performs the HTA requirement (see below).

HAZMAT Tracking Activity (HTA)—This AFMAN uses the acronym HTA to describe the location, organization, or function that performs tasks commonly referred to as "HAZMART" requirements. An HTA is the only entity on an installation authorized to issue government-owned HAZMAT from any source (e.g., GPC, AF Form 9, or any DoD standard supply system). In addition, HTAs can be established within other organizations to facilitate HAZMAT tracking across the installation.

Hydrochlorofluorocarbons (HFCs)—Commonly used in residential heat pumps, air conditioning and facility refrigerant systems since the 1990s following the phase out of CFCs in developed countries in 1995.

Inadvertent Release—Unintended and unplanned releases. Inadvertent releases do not include releases resulting from the intended use of the material (e.g., the release of Halon in actual firefighting or rendering a fuel tank inert).

Industrial Solid Waste (ISW)—SW generated by manufacturing or industrial processes that is not a HW regulated under subtitle C of RCRA. Such waste may include, but is not limited to, waste resulting from the following manufacturing processes: electric power generation; fertilizer/agricultural chemicals; food and related products/by-products; inorganic chemicals; iron and steel manufacturing; leather and leather products; nonferrous metals manufacturing/foundries; organic chemicals; plastics and resins manufacturing; pulp and paper industry; rubber and miscellaneous plastic products; stone, glass, clay, and concrete products; textile manufacturing; transportation equipment; and water treatment.

Initial Accumulation Point—A collection point located at, or near, the point of waste generation where wastes are initially accumulated. The area must be under the control of the operator of the process generating the waste. The operator must be near the area often enough to detect a leak

within a reasonable time frame. A maximum of 55 gallons of HW or one quart of acute HW may be accumulated at an initial accumulation point. If more than this amount is accumulated, the excess must be moved to a HWAS within three days of exceeding the limit. Unless the quantity limit is exceeded, or state regulations require a limit on storage time (i.e., California), there are no storage time limits that apply to initial accumulation points. Initial accumulation points are also known as satellite accumulation points (SAP). (40 CFR Part 262)

Installation Commander—The host unit commander who discharges the duties directed by U.S. statutes or AF directives.

Integrated Solid Waste Management (ISWM)—The ISWM approach is designed to minimize the initial generation of the materials through source reduction, then through reusing and recycling to further reduce the volume of materials being sent to landfills or incineration.

Key Source Categories—The AF-wide top emitting source categories, which includes RICE and boilers/process heaters.

Liquid Polychlorinated Biphenyl (PCB)—A homogenous flowable material containing PCBs and no more than 0.5 percent by weight non-dissolved material.

Listed HW—A specifically identified SW, material, or item listed in 40 CFR Part 261.

Maintenance Area—Any geographic region of the U.S. designated as attainment subject to the requirement to develop a maintenance plan under § 175A of the CAA, as amended.

Manifest—HW shipping document required by federal or state regulatory agencies for transportation of HW in order to track HW to a permitted or interim status TSDF; they are signed by the installation commander or a named representative. (Refer to 40 CFR Part 262).

Major Stationary Source & Major Emitting Facility—Except as otherwise expressly provided, both terms mean sources that emit 100 tons per year or more of any air pollutant. The exceptions are:

- 1) 250 tons per year of any regulated pollutant from any source in an attainment area other than one of the twenty-eight listed sources in 42 USC § 7479, *Prevention of Significant Deterioration of Air Quality, Definitions*.
- 2) 50 tons per year/ 25 tons per year/ 10 tons per year of Volatile Organic Compounds (VOCs) or NO_x in serious, severe, and extreme O₃ nonattainment areas, respectively.

Mobile Source—Any non-stationary source of air pollution, such as cars, trucks, buses, planes, trains, motorcycles, and gasoline-powered lawn mowers. Mobile sources are typically classified as being either “on-road” or “non-road” in nature. Examples of on-road sources include cars, trucks, and buses; while examples of non-road sources include construction equipment, aircraft, aircraft ground support equipment, and other tactical equipment used in combat or combat support operations.

Monitoring—Periodic or continuous surveillance or testing to determine the level of compliance with statutory requirements and/or pollutant levels in various media or in humans, animals, and other living things.

Municipal Solid Waste (MSW)—A subset of SW that is defined as durable goods (e.g., appliances, tires, batteries), non-durable goods (e.g., newspapers, books, magazines), containers

and packaging, food wastes, yard trimmings, and miscellaneous organic wastes from residential, commercial, and industrial non-process sources.

National Ambient Air Quality Standards (NAAQS)—Standards established by the EPA for six criteria air pollutants that are commonly found in ambient air throughout the country. Two types of NAAQS have been established. Primary standards set limits to protect public health, while secondary standards set limits to protect public welfare. Areas with good air quality are referred to as being in “attainment” with the NAAQS, while areas with poor air quality are referred to as being “nonattainment” with the NAAQS.

New Source—Any stationary source that is built or modified after publication of final or proposed regulations that prescribe a standard of performance intended to apply to that type of emission source.

New Source Performance Standards—Uniform national air emission standards established by EPA that limit the amount of pollution allowed from new or existing sources that have been modified. New Source Performance Standards are found in 40 CFR **Part 60**.

Nonattainment Area—Geographic area with measured air quality that does not meet one or more of the NAAQS for the criteria pollutants designated through the CAA.

Overseas—A geographic area located outside the jurisdiction of the United States, which includes land and associated territorial sea, contiguous zones, and exclusive economic zones of the United States; an area outside the United States (e.g., a foreign country).

Overseas Environmental Baseline Guidance Document (OEBGD)—A set of objective criteria and management practices developed by the DoD in accordance with DoDI 4715.05, to protect human health and the environment.

Ozone Depleting Substance (ODS)—Refers to Class I and Class II ODS, as defined by the *Montreal Protocol on Substances that Deplete the Ozone Layer*. Also, as defined in 40 CFR **Part 82**. Manufactured chemicals, especially halocarbon refrigerants, solvents, propellants and foam blowing agents such as Chlorofluorocarbons, Hydrochlorofluorocarbons and Halons.

ODS Defense Reserve—Stockpile for out-of-production Class I ODS and HCFC-22 (also known as R-22). Only approved source of supply for AF Class I ODS usage requirements. The ODS Defense Reserve is operated by DLA within their Aviation Engineering organization in Richmond, Virginia. DLA is DoD's central manager for mission-critical ODS for all of the military services and the Coast Guard. In addition to the Reserve in the U.S. at Richmond, Virginia, there are overseas collection points at DLA distribution depots in Germany, Hawaii and Japan. (<https://www.dla.mil/Aviation/Offers/Services/AviationEngineering/OzoneDepRsrv.aspx>).

Personal Property—Any property including military equipment, but excluding real property, consumable items, component parts of a higher assembly, or items that lose their individual identity through use.

Playbook—Interactive, web-based tool designed to improve, standardize, and implement civil engineering processes across a dispersed workforce. Playbooks provide a rapid, centralized means to supplement existing policy, such as AFPDs and AFIs, with intuitive, non-directive guidance and new information. These tools are built using civil engineering expertise at all organizational levels, and include roles and responsibilities, step-by-step instructions, job aids, process flows, and

links to relevant laws, regulations, and policies. Civil engineering playbooks are on the HAF A4C Portal at this link as of the date of this publication: <https://cs2.eis.af.mil/sites/10041>.

Polychlorinated Biphenyl (PCB) article—Any manufactured article, other than a PCB container, that contains PCBs and whose surface has been in contact with PCBs. PCB articles include capacitors, transformers, electric motors, pumps, pipes, and any other manufactured item that has functions dependent upon its design.

Polychlorinated Biphenyl (PCB) bulk product waste—Waste derived from manufactured products containing PCBs in a non-liquid state, at any concentration where the concentration at the time of designation for disposal was 50 ppm or greater PCBs. PCB bulk product waste does not include PCB liquids, PCB articles, PCB remediation waste, PCB containers, or PCB household waste. PCB bulk product waste can include, but is not limited to: (1) Non-liquid bulk wastes or debris from the demolition of buildings and other man-made structures manufactured or coated with PCBs. PCB bulk product waste does not include debris from the demolition of buildings or other man-made structures that is contaminated by spills from regulated PCBs that have not been disposed or decontaminated in accordance with storage and disposal provisions. (2) PCB-containing wastes from the shredding of automobiles, household appliances, or industrial appliances. (3) Plastics (such as plastic insulation from wire or cable; radio, television and computer casings; vehicle parts; or furniture laminates); preformed or molded rubber parts and components; applied dried paints, varnishes, waxes or other similar coatings or sealants; caulking; adhesives; paper; Galbestos (corrosion resistant metal cladding); sound deadening or other types of insulation; and felt or fabric products such as gaskets. (4) Fluorescent light ballasts containing PCBs in the potting material.

Polychlorinated Biphenyl (PCB) household waste—PCB waste that is: 1) generated by residents on the premises of a temporary or permanent residence for individuals (including individually owned or rented units of a multi-unit construction); and 2) that is composed primarily of materials found in wastes generated by consumers in their homes. PCB household waste includes unwanted or discarded non-commercial vehicles, household items, and appliances generated on the premises of a residence for individuals as a result of routine household maintenance by or on behalf of the resident. Bulk or commingled liquid PCB wastes at concentrations of 50 ppm or greater, demolition and renovation wastes, and industrial or heavy-duty equipment with PCBs are **not** household wastes. EPA has not clearly defined what constitutes the difference between routine household maintenance wastes and renovation wastes.

Polychlorinated Biphenyl (PCB) remediation waste—Waste containing PCBs as a result of a spill, release, or other unauthorized disposal, at the following concentrations: Materials disposed before 18 April 1978, which are currently at concentrations 50 ppm or greater PCBs, regardless of the concentration of the original spill. Materials currently at any volume or concentration where the original source was 500 ppm or greater PCBs, beginning on 18 April 1978, or 50 ppm or greater PCBs beginning on 2 July 1979. Materials currently at any concentration if the PCBs are from a source not authorized for use.

Polychlorinated Biphenyl (PCB) transformer—Any transformer that contains ≥ 500 ppm PCBs. For PCB concentration assumptions applicable to transformers containing 1.36 kilograms (3 lbs.) or more of fluid other than mineral oil, see 40 CFR Part 761. For provisions permitting reclassification of electrical equipment, including PCB Transformers, containing ≥ 500 ppm PCBs to PCB-Contaminated Electrical Equipment, see 40 CFR Part 761.

Potential to Emit (PTE)—The maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design if the limitation is enforceable by the EPA.

Precursors of a Criteria Pollutant—Precursors are those pollutants that contribute to the formation of a criteria pollutant. For O₃, precursors are NO_x (unless an area is exempted from NO_x requirements under the CAA, Section 182(f)), and VOCs; and for PM₁₀, precursors are those pollutants described in the applicable nonattainment area SIP as significant contributors to PM₁₀ levels. For PM_{2.5}, the scientifically recognized precursors are ammonia, SO₂, NO_x, and VOCs per EPA's proposed implementation rule at 70 Federal Register 65983 (November 1, 2005). As of this writing it is uncertain which, if any, of these is actually regulated as precursors for purposes of NSR, General Conformity, or other SIP rules.

Prevention of Significant Deterioration (PSD)—The EPA program in which federal and/or state permits restrict emissions for new or modified sources in places where air quality is already better than required to meet the NAAQS.

Putrescible Waste—Organic materials prone to degrade rapidly, giving rise to obnoxious odors.

Process—A uniquely defined “unit of work” bounded by (1) ESOH regulatory drivers, and (2) hazard recognition, evaluation, and control. Shops provide the Technical Order number, title, page, and Paragraph information that identify the work “step” in an overall process. However, this information is captured only as a “driver” for the identified process; TO “steps” are not the sole determinants in defining a process.

Process-specific Authorization—BE, SE, or CE approvals to authorize the use of a given HAZMAT. Process-specific authorizations approve the use of a particular HAZMAT in a given process in specified amounts.

Qualified Recycling Program (QRP)—A recycling program that manages proceeds pursuant to 10 USC § 2577 and requires concerted efforts to divert or recover scrap or waste from waste streams and identify, segregate, and maintain the integrity of the recyclable materials to maintain or enhance the marketability of the materials. A QRP includes adherence to a control process providing accountability for all materials processed through program operations.

Records Disposition Schedule (RDS)—Air Force Records Information Management System (AFRIMS) recordkeeping requirements.

Reportable Quantity (RQ)—For any CERCLA hazardous substance, the RQ is that listed in the final RQ column of Table 302.4 in 40 CFR **Part 302**. For an EPCRA Extremely Hazardous Substances, the RQ is that listed in the Reportable Quantity column of Appendix A or B in 40 CFR **Part 355**. For Department of Transportation requirements, the RQ list is found at 49 CFR Part 172-180.

Responsible Official—The installation commander for purposes of signing Title V Operating Permit applications, amendments, supplements, or corrections and for certifying Title V Operating Permit deviation reports, monitoring reports, compliance certifications, or any other document that requires certification by a “Responsible Official” under the applicable regulations. The responsibility to certify the federal agency Responsible Official may not be delegated. 40 CFR

Part 70 defines a Responsible Official as follows: “For a municipality, state, Federal, or other public agency: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of EPA).”

Risk Management—The process of evaluating alternative regulatory and non-regulatory responses to risk and selecting among them. The selection process requires consideration of impact to human health and the environment, legal, economic, military and social factors.

Risk Management Plan—A plan that documents the actions a facility that stores, transports or uses regulated hazardous substances at levels exceeding established thresholds will take to prevent and mitigate their accidental release, and reduce the severity of releases that do occur. Risk Management Plan requirements are found at 40 CFR **Part 68**.

Safety Data Sheets (SDS)—A hazardous material SDS is a document that contains information on the potential health effects of exposure to chemicals, or other potentially dangerous substances, and on safe working procedures when handling chemical products. The SDS can consist of a comprehensive set of material, chemical, and regulatory data necessary to develop and implement ESOH controls for mission activities involving hazardous materials.

Sovereign Immunity—The legal principal that the federal government cannot be subjected to state penalties or judgments of state courts except where Congress has expressly waived such immunity in the CAA or other statute.

State Implementation Plans—These are state plans for the establishment, regulation, and enforcement of air pollution standards. SIPs approved by the EPA are federally enforceable.

Stationary Source—A fixed, non-moving producer of pollution, such as power plants and other facilities using industrial combustion processes, paint spray booths, fuel storage tanks, and solvent cleaning facilities.

Synthetic Minor—A facility or stationary source that has voluntarily limited its PTE by means of a federally enforceable order, rule, or permit condition to ensure its emissions do not exceed major source thresholds.

United States—The several States, District of Columbia, Commonwealths of Puerto Rico and Northern Mariana Islands, American Samoa, Guam, Midway and Wake Islands, United States Virgin Islands, any other territory or possession of the United States, and associated navigable waters, contiguous zones, and ocean waters of which the natural resources are under the exclusive management authority of the United States.

Universal Waste—Certain types of common HW for which the EPA or state regulators have streamlined collection and management requirements to reduce the regulatory burden on generators and facilitate environmentally sound collection and proper recycling or treatment. At the Federal level universal wastes include batteries, pesticides, mercury-containing lamps, and mercury-containing equipment. See universal waste requirements in 40 CFR Part 273, *Standards for Universal Waste Management*.

User—Anyone or any organization utilizing hazardous material in the performance of their AF mission.

Virtual Environmental Management Office (VEMO)—Pages and tools contained within VEMO function as an electronic EMS manual and performance tracker to ensure conformance and mission effectiveness (if maintained as described in this manual). VEMO is also used as a tool to aid in communication between ANGRC and individual ANG bases. As of the date of this publication, this is the link to VEMO: <https://intelshare.intelink.gov/sites/vemo>

Volatile Organic Compounds (VOCs)—Any organic compound that participates in atmospheric photochemical reactions, except for those designated by EPA as having negligible photochemical reactivity.

Work Area—A definable location where personnel perform work. This can be outdoors (e.g., an aircraft trim pad) or indoor; administrative or industrial; or any installation-level location where a hazardous material is used in the performance of a specific process. Synonymous with work center.

Yard Trimmings—Grass clippings, leaves, brush, weeds, Christmas trees, and hedge and tree prunings from residences and businesses. Yard trimmings may also include stumps and brush, but these materials are not normally handled at composting facilities.

Attachment 2

WASTE MANAGEMENT COMPLIANCE STATUTES AND REGULATIONS

A2.1. 42 USC §§ 6901-6992, RCRA, as amended, sets minimum standards for managing SW and HW at those DoD Installations within the US and US territories subject to the jurisdiction of US federal law. The RCRA regulations governing SW and HW management generally are found at 40 CFR Parts 239-282.

A2.2. 29 USC §§ 651-678, Occupational Safety and Health Act, sets federal health and safety standards for employees who work with hazardous substances, training requirements for HW clean-up operations at RCRA facilities, and emergency response operations, which is also known as Hazardous Waste Operations and Emergency Response training. The OSHA regulations in 29 CFR **Part 1910.1200** describes employer hazard communication requirements, commonly referred to as HAZCOM. **Note:** OSHA has limited ability to regulate AF installations and activities. HAZCOM requirements for AF installations and personnel are specified in AFI 90-821.

A2.3. 49 USC §§ 5101-5128, Hazardous Materials Transportation Act, requires the Secretary of Transportation to promulgate standards for the interstate and intrastate commercial transportation of hazardous materials. These standards are found at 49 CFR Parts 171-180 and apply to transportation of hazardous materials and HW in the US and US territories. 49 USC §§ 5101-5128 does not apply to overseas installations, but there are strict controls on the transnational shipment of hazardous materials and HW. Contact the DLA Disposition Services and the MAJCOM JA for guidance about international shipping requirements.

A2.4. 15 USC §§ 2601-2692, Toxic Substances Control Act, regulates the management and disposal of various chemical substances and mixtures including LBP, PCBs, and asbestos. Toxic Substance Control Act regulations are found at 40 CFR Parts 700-799, *Toxic Substances Control Act*, with the regulations governing the management of LBP, PCBs, and asbestos found at 40 CFR Part 745, 40 CFR Part 761, and 40 CFR Part 763 respectfully.

A2.5. 42 USC §§ 9601-9675, Comprehensive Environmental Response, Compensation, and Liability Act, and Public Law (PL) 99-499, Superfund Amendments and Reauthorization Act, governs requirements for cleaning up contaminated sites. CERCLA regulations are found at 40 CFR Parts 300-374, *National Oil and Hazardous Substances Pollution Contingency Plan*. At the time that PL 99-499 was passed, Congress enacted 10 USC § 2701, *Environmental Restoration Program*. That statute created the Defense Environmental Restoration Account (the —DERA account), which is used to pay for DoD cleanups. Each DoD agency was given its own restoration account, so that the AF restoration (cleanup) account is known as the AF Environmental Restoration Account.

A2.6. PL 102-386, The Federal Facility Compliance Act, which amended 42 USC § 6961, Application of Federal, State, and Local Law to Federal facilities, generally waives the federal government's sovereign immunity under RCRA and allows state and federal regulatory agencies to fine federal facilities for violating applicable federal, state, and local SW and HW laws.

A2.7. The following laws and regulations also impact SW and HW management: 10 USC § 2577, 10 USC § 2692, 32 CFR Part 172, and 41 CFR Part 102, *Federal Management Regulations*.

A2.8. EPA authorized states may adopt or enact regulations as long as those regulations are at least as stringent as federal SW and HW regulations. Most states have SW and HW regulations that are more stringent than federal regulations. AF installations must follow authorized state or local SW and HW regulations that are more stringent (but not broader in scope) than the federal regulations. **(T-0).**

Attachment 3

AIR EMISSION REDUCTION CREDITS

A3.1. Air Emission Reduction Credits. 42 USC §§ 7401-7671q, CAA allows the EPA and the states to develop economic incentive programs to control and reduce air emissions. Such programs allow sources to “generate”, “buy”, “sell”, “bank”, or “trade” emissions reduction credits (ERCs). ERCs are authorized and created by appropriate state or local authorities, and will vary from location to location pursuant to applicable EPA rules. ERC programs need to be approved by EPA in a State Implementation Plan to become effective. Credits earned by any source that permanently reduces emissions beyond its reduction requirements can be traded to another source that could use such credits, in lieu of on-site reductions, to meet its reduction obligations. ERCs may also be banked for future use as offsets for nonattainment area NSR or General Conformity determinations. ERCs are treated as federal personal property and disposed of according to the appropriate federal property disposal regulations. Flying operations shall not be reduced for the sole purpose of obtaining ERCs; however, installations must ensure that emissions from aircraft flying operations are accounted for in comprehensive emissions inventories and memorialized in any applicable SIP emissions budget for the installation.

A3.2. Emission Reduction Credit Identification. ERCs can be created as a result of operational changes or installation closure. They can be obtained by removing pollutant-emitting equipment from service or reducing emissions from equipment, if the applicable air quality district allows. Planning for ERC utilization includes a determination of the applicable requirements for generation as soon as possible to avoid inadvertent loss of ERCs due to missed requirements. For example, some local rules require submission of an application for ERCs along with supporting documentation prior to any shutdown of the emissions source while other local rules require submission of the application within 90 days of permanent shutdown. In addition, some states may have laws that expressly apply to various aspects of ERC generation and disposition involving military base closures and realignments, such as the Cannella Bill in California, AB 3204 (1994), codified at Health and Safety Code Section 40709.7.

A3.3. Emission Reduction Credit Inventory and Classification. Within one year, or as early as possible, prior to the departure of the active mission from a currently announced installation closure or realignment (immediately at installations where the active mission has departed or equipment emitting air emissions are discontinued, or within six months of an installation closure announcement for future closures), the base environmental function will complete an inventory of all existing/potential sources of ERCs and associated emissions, and have a legal review prepared summarizing the applicable air quality district regulations on ERCs. Copies of the applicable ERC regulation will be included when facility ERCs are identified and any limitations on the disposition of the ERCs will be noted in the legal review. Such limitations may include prohibitions on the use of ERCs at closing facilities and if there are any restrictions on the leasing of ERCs. Forward the inventory, legal review, and appropriate regulations governing the use of these ERCs to the AFCEC Legislative and Regulatory Engagement Division (AFCEC/CZP). The ERCs will be initially classified as “related personal property ERCs”, “operational needs requirement ERCs”, or “personal property ERCs” on the inventory. The AFCEC Regulatory/Legislative Support Branch will circulate the inventory to other MAJCOMs and installations in the same air quality district in order to identify ERCs they might need. AFCEC/CZ will then validate the list and forward it with comments back to the appropriate MAJCOM and AFCEC/CZ. AFCEC/CZ, in concert with the

appropriate MAJCOM, will review/validate the ERCs/categories, coordinate with AF/A4C, and submit to SAF/IEE for final approval.

A3.4. Emission Reduction Credit Application. The CAA allows sources in nonattainment areas with EPA-approved ERC programs to “trade” ERCs. Installations must follow regulatory agency procedures to apply for and obtain ERCs if interested in obtaining ERCs and if they have adequate funds for the associated fees. Installation realignment and closure funds may be used to conduct the emission reduction credit inventory and to pay for application fees for installations slated for closure.

A3.5. Emission Reduction Credit Disposition. Once an air quality district issues ERCs, and SAF/IEE has approved their use, ERCs can be disposed in the following manner.

A3.5.1. “Operational needs requirement ERCs” can be banked for the requirements of the originating installation or can be transferred to another AF organization that would need to buy the credits.

A3.5.2. “Related personal property ERCs” will be disposed of in the same manner as the real property on the inventory to which they are “related.”

A3.5.3. “Personal property ERCs” will be screened with other DoD and other federal agencies. Thereafter, the installation will transfer any remaining ERCs as surplus property to the General Services Administration (GSA) for disposal under GSA regulations.

A3.5.4. SAF/IEE will resolve any disputes over disposition of ERCs.

A3.6. Emission Reduction Credit Use. ERCs can only be used in the same air quality control district/region in which they are generated, except where state or local laws and regulations provide otherwise. For example, the Discrete Emission Reduction Credit (DERC) regulations in Texas allow stationary and mobile DERCs generated within the state, with certain limitations, to be used anywhere within the state. In addition, and under certain circumstances, DERCs created outside the state may also be used within the state. In California, Section 40709.6 of the Health and Safety Code permits the inter-basin transfer of emission offsets or ERCs from upwind to downwind sources, even though they may be in different air quality control areas.