

Headquarters U.S. Air Force

Integrity - Service - Excellence

Effective Environmental Management Systems



U.S. AIR FORCE

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HQ USAF Civil Engineering
31 October 2019**

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Air Force Civil Engineer Center**



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Purpose

- **Provide environmental professionals with the latest situational awareness on the Air Force Environmental Management Systems (EMS) determination of Effectiveness**



AF Environmental Stewardship

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MEETING CLEANUP RESPONSIBILITIES



"GREENING WEAPON SYSTEMS"



Air Force Mission

Global Environmental Stewardship

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PARTNERSHIP AND TRAINING

COMPLYING WITH LAW



MAINTAINING AIRSPACE / RANGE ACCESS



- Env Compliance Goal: Ensure compliance with all federal, state, and local Env laws
- Operationalize an Effective Environmental Management System (ISO 14001, Exec Order 13693, DoDI 4715.17, AFPD 90-8, AFI 32-7001,
 - HAF ESOH Council: Comply with Env law, reduce risk, continuously improve)



AF Environmental Stewardship



***161 Installations,
44 Range Complexes***



> 200 Miles of Coastline



***329 Federally-Recognized
Tribes***



***598K acres of forest
266K acres of wetlands***



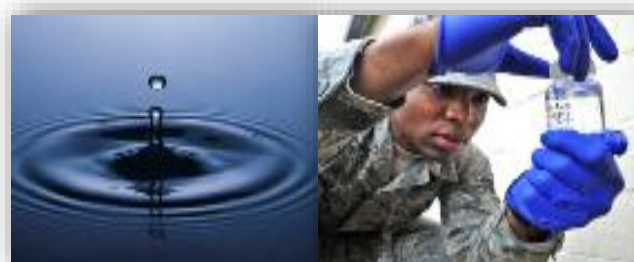
***9M Acres of Land:
Forests, prairies, deserts,
wetlands, coastal habitats***



***124 Threatened/Endangered
Species on 54 installations***



***246 Waste Water Permits
207 Storm water Permits***



***180 Water Systems
Serving ~1M Personnel***



***240 Clean Air Operating
Permits***

Natural & Built Infrastructure Provides Capacity for Mission Capability

How We Support



**Manage/Track Air
Sources/Permits
SPCC/CSCP Plans**



**Centralized Mgmt of
Environmental Support**



**Partnerships with Federal,
State, NGOs, & Universities**



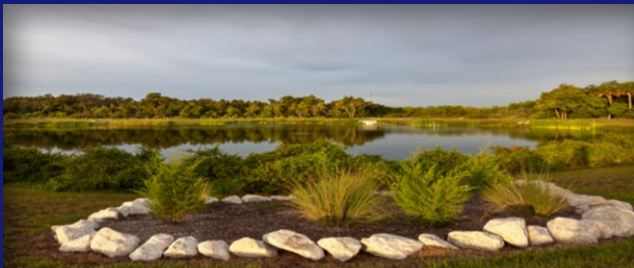
**Haz Materials Mgmt., QRP,
HazWaste Mgmt**



**Enterprise IT for Compliance
Reporting & Tracking**



**Consultation with Tribes, Alaska
Native/Hawaiian Groups**



**Compliant Wastewater
Storm Water Pollution Prvn**



EMS Framework



**Conservation Planning
(INRMPS/ICRMPS)**



Why does the AF use an EMS?

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- **It is the responsibility of all Airmen to support the overall AF Mission**
- **This is currently being achieved in our environmental framework by ensuring:**
 - **Comply: Comply with all environmental legal obligations**
 - **Reduce Risk: Ensure availability of workforce, natural, and manmade resources by effectively managing environmental risks**
 - **Continually Improve: Instill a culture of continual environmental improvement**
- **Executive Order Driven: EO 13423 – All DOD “Appropriate Facilities” implement conforming EMS by Dec 09**



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EMS OVERVIEW



- **Identifies and Provides Planning & Management**
- **Identifies Risks/Creates Focus To Reduce the Risks**
- **Involves and Integrates Senior Management**
- **Air Force using ISO 14001 Standard**
- **AF policy established Environmental, Safety and Health Councils (ESOHC)**

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EMS Implementation Status

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- **EO 13423 – All DOD “Appropriate Facilities” implement fully conforming EMS by Dec 09**
 - **AF has 86 “appropriate facilities”, i.e., major installations**
 - **Air National Guard uses an overarching EMS (applies to multiple installations)**



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E.O. 13834, Efficient Federal Operations

- It is the policy of the United States that agencies shall ***meet such statutory requirements*** in a manner that ***increases efficiency, optimizes performance, eliminates unnecessary use of resources, and protects the environment***. In implementing this policy, ***each agency*** shall prioritize actions that ***reduce waste, cut costs, enhance the resilience of Federal infrastructure and operations, and enable more effective accomplishment of its mission.***



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E.O. 13834, Efficient Federal Operations (Cont)

- **Council on Environmental Quality, Office of Federal Sustainability Implementing Instructions, April 2019**
 - **Continue effective management strategies, such as Environmental Management Systems (EMS), that facilitate implementation and progress toward E.O. goals (Page 9).**
 - ***Resilience* generally can be defined as the ability to anticipate, prepare for, and adapt to changing conditions and withstand, respond to, and recover rapidly from disruptions.**



ISO 14001:2015 Requirements

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- ***Leadership:*** Emphasis on leadership involvement with the entire management system to prevent delegation of responsibility to a solitary management representative **(EFFECTIVENESS)**
- ***Environmental performance:*** Emphasis with regard to continual improvement, from improving the management system to improving environmental performance **(EFFECTIVENESS)**
- ***Protecting the Environment:*** Commit organizations to proactively protect the environment, consistent with the context of the organization **(EFFECTIVENESS)**



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Air Force Definition of an Effective EMS

- **DoD Guidance for Executive Order 13693, issued 30 MAR 16, requires federal facilities to continue to implement and maintain formal EMSs where “proven effective”**
- **An Effective Air Force EMS:**
 - **Has completed a management review at least annually**
 - **Meets the effectiveness criteria of leadership commitment, risk management, planning, and compliance**



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Management Review Element Mapping to Effectiveness Criteria

Management Review Elements



EMS Effectiveness Criteria



**Four OSD EMS
Effectiveness
elements are the
same for all
Military Services**

Management Review Element Mapping to Effectiveness Criteria

Environmental Policy / Commitment Statement	
Aspect Inventory Review and Approval	
Changing Legal Circumstances	
Environmental Action Plan Status	
External Communications	
Evaluation of Compliance	
Corrective and Preventive Action Status	
Previous Management Review Actions	



Leadership Commitment	Risk Management	Planning	Compliance
			



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Installation Level Effectiveness Criteria

- **A senior leadership EMS Management Review has been completed within the past 12 months**
- **The Management Review determined the EMS is effective in the following:**
 - **Leadership Commitment:** Leadership is engaged to ensure: environmental commitment is current and communicated; communication with external and internal interested parties is ongoing; and management review actions are resolved.
 - **Risk Management:** EMS is focused on risk identification and management to ensure: environmental aspects are identified; and the organization adjusts and adapts to changing legal and other requirements.
 - **Planning:** Actions are planned and controls are sustained to ensure: objectives, targets, and required resources are established and implemented; and Environmental Management Plans and Permits are current.
 - **Compliance:** EMS achieves compliance and ensures: non-compliance findings from internal or external sources are tracked; regulatory notices of violation are resolved; and corrective and preventative actions are on schedule to be completed.
- **If YES, EMS is Effective**
- **If NO, EMS is Not Effective**



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Installation Level Effectiveness Criteria

Overall Facility/Organization-Level Rating		Effective
Most Recent Review	Previous Review	
12/15/2016	12/10/2015	
Element	Rating	
Leadership Commitment: Leadership is engaged to ensure: environmental commitment is current and communicated; communication with external and internal interested parties is ongoing; and management review actions are resolved.	Yes	
Risk Management: EMS is focused on risk identification and management to ensure: environmental aspects are identified; and the organization adjusts and adapts to changing legal and other requirements.	Yes	
Planning: Actions are planned and controls are sustained to ensure: objectives, targets, and required resources are established and implemented; and Environmental Management Plans and Permits are current.	Yes	
Compliance: EMS achieves compliance and ensures: non-compliance findings from internal or external sources are tracked; regulatory notices of violation are resolved; and corrective and preventative actions are on schedule to be completed.	Yes	



Effectiveness Criteria

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Home



Edit Review
Details



View Current
Dashboards



Briefing View



User Guide

Status Icon	Items to Review	Good	Caution	Action/Attention Needed
Environmental Policy/ Commitment Statement	<ul style="list-style-type: none">ESOHC meeting minutes documenting annual review of Environmental Policy/Commitment StatementSigned Wing CC Environmental Policy/Commitment Statement <p>See AFI 32-7001, Section 3.3.2</p>	ESOHC has completed an annual review/approval of the Environmental Policy/Commitment Statement AND Environmental Policy/Commitment Statement is posted to eDASH AND Environmental Policy/Commitment Statement is available to the public AND Environmental Policy/Commitment Statement is effectively implemented and understood by affected installation personnel and stakeholders as verified through the Air Force Inspection System (AFIS)	ESOHC has completed an annual review/approval of the Environmental Policy/Commitment Statement BUT Environmental Policy/Commitment Statement is NOT posted to eDASH OR Environmental Policy/Commitment Statement is NOT available to the public OR Environmental Policy/Commitment Statement is NOT effectively implemented and understood by affected installation personnel and stakeholders as verified through the AFIS	ESOHC has NOT completed an annual review/approval of the Environmental Policy/Commitment Statement



Management Review Tool (MRT)

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- **AF Policy requires installations to complete one Management Review each year**
- **Management Review criteria has changed**
 - **We are moving beyond EMS conformance**
 - **We are now measuring both whether our EMSs conform to policy requirements and whether effective in doing so**



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MRT (Cont)

- **Allow Installations the ability to select Management Review FY**
 - **Installation selects Management Review FY**
- **Require ESOHC approval within the Management Review 'Annual' review period**
 - **Allows flexibility for delayed/cancelled ESOHC meetings during Annual review**
 - **ESOHC meetings must occur during Annual review (within the FY selected by the Installation)**



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MRT (Cont)

- **Link to Current Effectiveness rating from Management Review Tool**
 - **Current Approach: Display current rating in the Management Review Tool's EMS Effectiveness Table**
 - **New Approach: Link to EMS Effectiveness Dashboard from the Management Review Tool for users to view Current Effectiveness Rating in authoritative data source**



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Management Review Tool

EMS Effectiveness Table

Home
 Edit Review Details
 View Current Dashboards
 Briefing View
 User Guide

Cannon Management Review FY19	
Environmental Policy / Commitment Statement	
Aspect Inventory Review and Approval	
Changing Legal Circumstances	
Environmental Action Plan Status	
External Communications	
Evaluation of Compliance	
Corrective and Preventive Action Status	
Previous Management Review Actions	

Review Details

Review Start Date: 2019-01-01
 Review End Date: 2019-05-01
 Installation: Cannon
 Sublocation:
 Review Creator: CALLEN, JONATHAN S CTR USAF AFMC AFCEC/CZCA
 Review POC(s):
 Status: In Progress
 Links:
 Notes / References:
 Approved By:
 Comments to Commander:

EMS Effectiveness
(Click for Current Effectiveness Rating)

FY19 Rating:

RST/IST MAJCOM
Fiscal Year: Current Effectiveness Rating Reset

	Green	Red	Gray
RST	19	5	0
IST	1	2	0
Installations	0	1	0

Overall Performance

Current Selection: West Region > Kirtland > Cannon

- **FY Rating displays in table (Green/Red/Gray)**
- **Current Rating is available by clicking 'EMS Effectiveness'**



Management Review Tool

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Management Review Results



Home



Edit Review Details



View Current Dashboards



Briefing View



User Guide

611th Management Review FY17

Environmental Policy / Commitment Statement



Aspect Inventory Review and Approval



Changing Legal Circumstances



Environmental Action Plan Status



External Communications



Evaluation of Compliance



Corrective and Preventive Action Status



Previous Management Review Actions



Review Details

Review Start Date: 2016-10-01

Review End Date: 2017-10-01

Installation: 611th

Sublocation:

Review Creator: LEEPER, KARLENE B GS-12 USAF PACAF 611 CES/CEIEC

Review POC(s): LEEPER, KARLENE B GS-12 USAF PACAF 611 CES/CEIEC;

Status: **In Progress**

Links:

Notes / References:

Approved By:

Comments to Commander:

EMS Effectiveness

Current Rating:



FY17 Rating:



Current EMS Effectiveness Rating

The current EMS Effectiveness rating represents the rating of the most recently completed management review. This rating is used for leadership briefing and reporting and displays on all relevant eDASH Dashboards

Green:

- A Management Review was completed (e.g., all management review elements were graded, AND Management Review includes an ESOHC approval date), AND
- No elements were graded RED

Red:

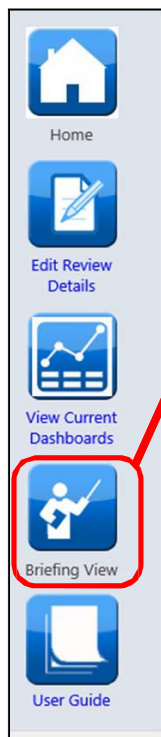
- A Management Review was NOT completed (e.g., not all Management Review elements were graded, AND/OR Management Review does not include an ESOHC approval date), OR
- At least one element was graded red



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Management Review Tool

Briefing View



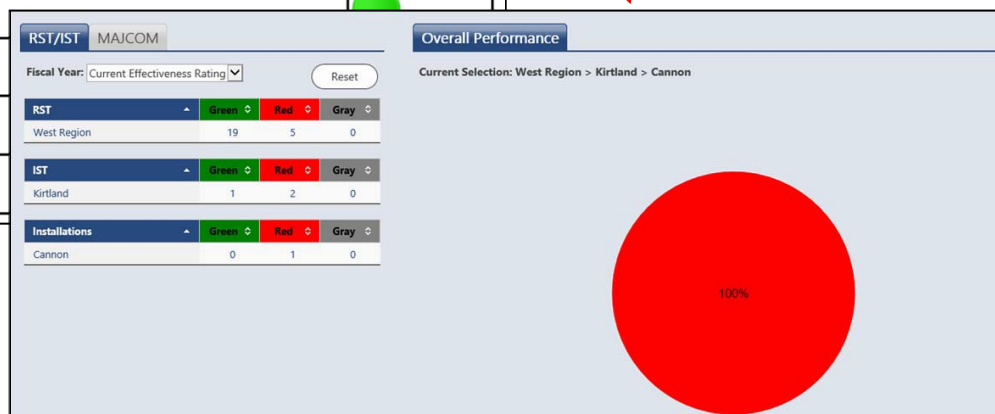
Cannon Management Review FY19

Review Start Date: 2018-12-31 Installation: Cannon Approved By: Date:
Review End Date: 2019-05-01 Sublocation: Date:
Notes / References:

[EMS Effectiveness Dashboard \(Click for Current Effectiveness Rating\)](#)

Completion of a Management Review using this Tool satisfies the Management Review requirements in AFI 32-7001, Section 8.2. Review and completion of all elements of the Management Review Tool incorporates the Environmental Program Status Management Review element (AFI 32-7001, section 8.2.2.3).

Environmental Policy / Commitment Statement	●
Aspect Inventory Review and Approval	●
Changing Legal Circumstances	●
Environmental Action Plan Status	●
External Communications	●
Evaluation of Compliance	
Corrective and Preventive Action Status	
Previous Management Review Actions	





EMS Effectiveness Dashboard

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EMS Effectiveness Dashboard

This dashboard displays Installation Environmental Management System (EMS) Effectiveness as determined by annually-required EMS Management Reviews. Click on a button/tab to see

RST/IST

MAJCOM

Fiscal Year: Current Effectiveness Rating

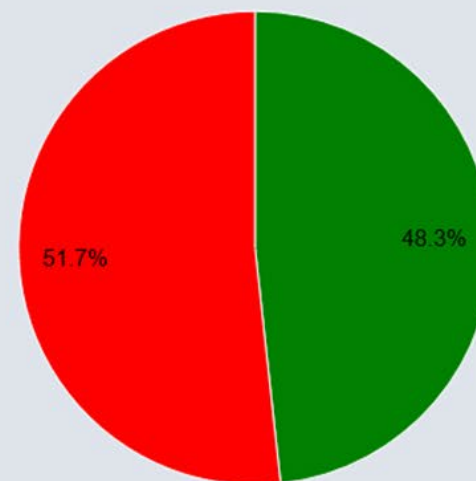
Reset

RST	Green	Red	Gray
East Region	11	5	0
Europe Division	4	8	0
Midwest Region	6	11	0
Pacific Division	4	5	0
West Region	13	11	0

IST	Green	Red	Gray
Barksdale	3	1	0
Edwards	2	1	0
Eglin	2	1	0
Hill	2	2	0
Japan/Korea	3	3	0
JBCHS	3	0	0
JBER	1	2	0
JBLE	1	2	0

Overall Performance

Current Selection: All Installations





FY Effectiveness Rating

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EMS Effectiveness Dashboard

This dashboard displays Installation Environmental Management System (EMS) Effectiveness as determined by annually-required EMS Management Reviews. Click on a button/tab to see the associated data.

RST/IST MAJCOM

Fiscal Year: FY17

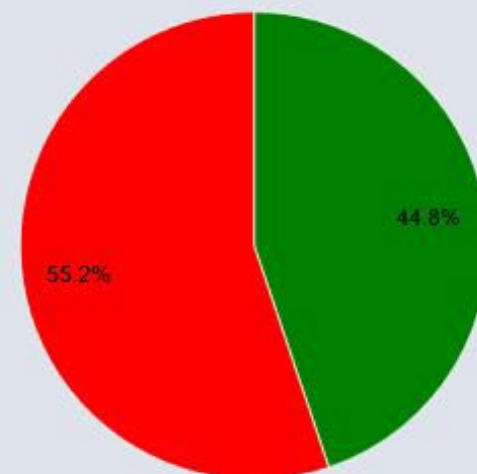
Reset

RST	Green	Red	Gray
East Region	11	5	0
Europe Division	4	8	0
Midwest Region	4	13	0
Pacific Division	4	5	0
West Region	12	12	0

IST	Green	Red	Gray
Barksdale	2	2	0
Edwards	2	1	0
Eglin	2	1	0
Hill	1	3	0
Japan/Korea	3	3	0
JBCHS	3	0	0
JBER	1	2	0

Overall Performance

Current Selection: All Installations





Current Effectiveness Rating

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IST - Barksdale						
Red. See Dashboard Key and/or Legend for description.						
Installation	Leadership Commitment	Risk Management	Planning	Compliance	ESOH Approval Date	Comments to Commander
Columbus						

Management Review Results



Home



Edit Review Details



View Current Dashboards



Briefing View



User Guide

Columbus Management Review FY17

Environmental Policy / Commitment Statement	
Aspect Inventory Review and Approval	
Changing Legal Circumstances	
Environmental Action Plan Status	
External Communications	
Evaluation of Compliance	
Corrective and Preventive Action Status	
Previous Management Review Actions	

Review Details

Review Start Date: 2016-10-01

Review End Date: 2017-12-01

Installation: Columbus

Sublocation:

Review Creator: JAGO, MICHAEL J GS-13 USAF AETC 14 CES/CEIE

Review POC(s): JAGO, MICHAEL J GS-13 USAF AETC 14 CES/CEIE;

Status: Complete

Links:

Notes / References:

FY17 Rolling stage II inspections started 16Nov 16.

FY 17 ESOH is on track.

The FY 17 program is ongoing; not yet closed out or complete.

FY 17 complete.

Approved By:

CFT Chair: SANSANO, ANTHONY J Col USAF AETC 14 MSG/CC

Date: Not entered

ESOH Chair: GOSNEY, DOUGLAS C Col USAF AETC 14 FTW/CC

Date: Not entered

Comments to Commander:



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Current EMS Effectiveness

- **Non-Effective EMS Challenges**
 - **Leadership Commitment**
 - Failure to conduct annual ESOHC management review
 - **Risk Management**
 - Permit requirements not being performed
 - Out of date Regulatory Plans
 - **Planning**
 - Failure to establish Objectives and Targets
 - **Compliance**
 - Not conducting required self-assessments
 - Enforcement Actions



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Benefits of Effectively implementing EMS

- **Improvements in overall environmental performance and compliance**
- **Provide a framework for using pollution prevention practices to meet EMS objectives**
- **Increased efficiency and potential cost savings when managing environmental obligations**
- **Promote predictability and consistency in managing environmental obligations**
- **More effective targeting of scarce environmental management resources**
- **Enhance public posture with outside stakeholders**
- **Ensure support for DOD Sustainability**

Environmental Compliance, Risk Reduction, Continuous Improvement



Conclusion

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- Air Force environmental program priorities continue to be:
 - comply with the legal obligations
 - reduce risk
 - continuously improve
- Responsible Environmental Management provides assured access to land, air and water to accomplish the Air Force mission that has inherent environmental risk
- Continue to meet environmental challenges to sustain the mission
- Build relationships and leverage Fed/State partners to achieve compliance & regulatory goals





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EMS Effectiveness

QUESTIONS