

# ***Headquarters U.S. Air Force***

---

*Integrity - Service - Excellence*

## **Enterprise, Environmental, Safety, Occupational Health- Management Information System**



**Nadine Gawlak  
HQ AFCESA/CEOI**

**U.S. AIR FORCE**

---

# Report Documentation Page

*Form Approved  
OMB No. 0704-0188*

Public reporting burden for the collection of information is estimated to average 1 hour per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA 22202-4302. Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to a penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number.

1. REPORT DATE <b>MAY 2009</b>	2. REPORT TYPE	3. DATES COVERED <b>00-00-2009 to 00-00-2009</b>	
4. TITLE AND SUBTITLE <b>Enterprise, Environmental, Safety, Occupational Health-Management Information System</b>		5a. CONTRACT NUMBER	
		5b. GRANT NUMBER	
		5c. PROGRAM ELEMENT NUMBER	
6. AUTHOR(S)		5d. PROJECT NUMBER	
		5e. TASK NUMBER	
		5f. WORK UNIT NUMBER	
7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) <b>Air Force Civil Engineer Center, AFCESA/CEOI, 139 Barnes Drive, Suite 1, Tyndall AFB, FL, 32403</b>		8. PERFORMING ORGANIZATION REPORT NUMBER	
9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)		10. SPONSOR/MONITOR'S ACRONYM(S)	
		11. SPONSOR/MONITOR'S REPORT NUMBER(S)	
12. DISTRIBUTION/AVAILABILITY STATEMENT <b>Approved for public release; distribution unlimited</b>			
13. SUPPLEMENTARY NOTES <b>Presented at the NDIA Environment, Energy Security &amp; Sustainability (E2S2) Symposium &amp; Exhibition held 4-7 May 2009 in Denver, CO.</b>			
14. ABSTRACT			
15. SUBJECT TERMS			
16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT <b>Same as Report (SAR)</b>
a. REPORT <b>unclassified</b>	b. ABSTRACT <b>unclassified</b>	c. THIS PAGE <b>unclassified</b>	
			18. NUMBER OF PAGES <b>13</b>
			19a. NAME OF RESPONSIBLE PERSON



**U.S. AIR FORCE**

---

# *Overview*

- **Purpose of EESOH-MIS**
- **Why EESOH-MIS**
- **Where We Are**
- **Situation**
- **Lessons Learned**
- **Benefits**



- **Supports the Air Force goal of reducing toxic and hazardous chemical reductions through risk management applied across the weapon system, facility and infrastructure life cycle**
- **The EESOH-MIS program is a comprehensive web based automated information system for the aggregation and collection of Environmental Data. Used to respond to specific environment, safety and occupational health (ESOH) impacts.**
- **Provides Hazardous Materials Tracking, Hazardous Waste and Cleanup functionality**
- **Allows roll up of data at the MAJCOM, Air Staff and OSD level**
- **Single application used throughout the Air Force**



U.S. AIR FORCE

# *Why EESOH-MIS?*

- **Implements SAF/IEE policy letter supporting the ESOH information integration vision**
- **Optimize base efficiencies**
  - **Eliminates multiple data entry in multiple environmental systems**
  - **Provides operational mission risk mitigation versus reactive actions**

EESOH-MIS is a comprehensive web-based automated information system for the aggregation and collection of Environmental, Safety & Occupational Health data



# Reality

## U.S. AIR FORCE

### EMIS



Shop  
 HazMat Authorizations  
 Use Information  
 Equipment  
 Controls

MSDS Data  
 Organization Data  
 Personnel Data  
 Location Data

BEE

Env

SE

LG

BEE

Env

SE

LG

BEE

Env

SAF/IEE



Wing



Shop Floor



### HMMS



Zones  
 HazMat Authorizations  
 Use Information  
 Equipment  
 Controls

MSDS Data  
 Organization Data  
 Personnel Data  
 Location Data

### CCS



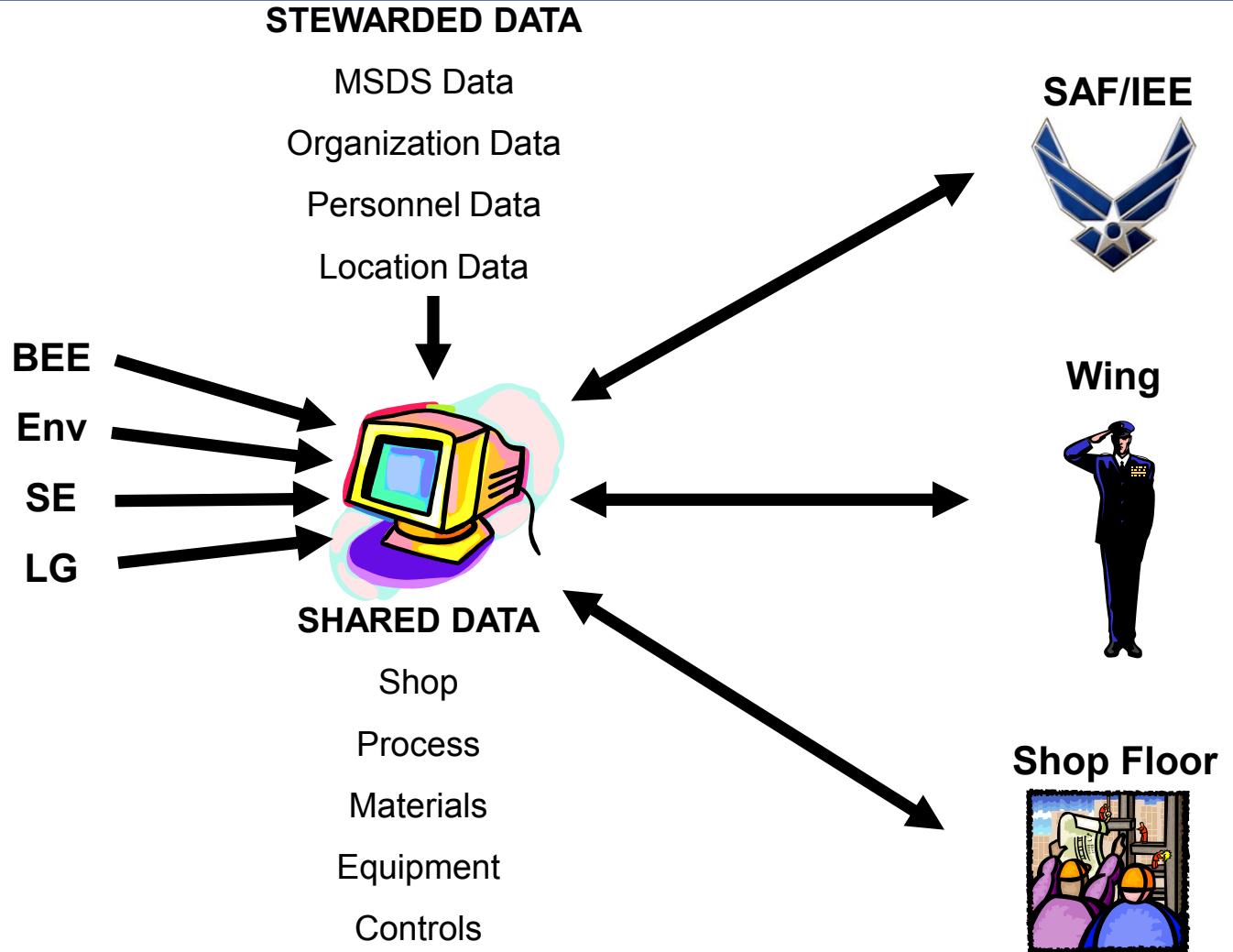
Shop  
 Exposure Groups  
 Processes  
 Hazmat Consumption for Air  
 Emission (APIMS)  
 Use Information  
 Equipment  
 Controls

MSDS Data  
 Organization Data  
 Personnel Data  
 Location Data



U.S. AIR FORCE

# Vision



*Integrity - Service - Excellence*

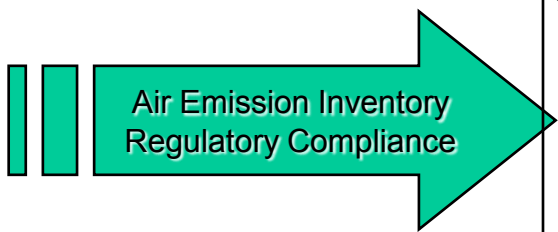
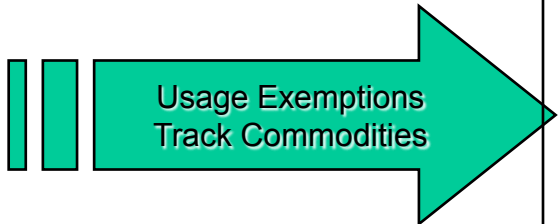
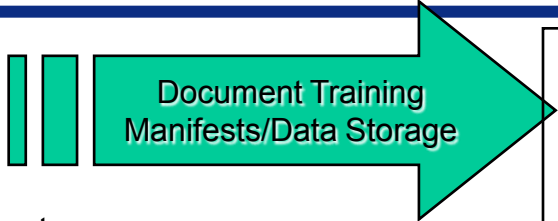


# EESOH Program Drivers

U.S. AIR FORCE



Hazardous Waste



EXECUTIVE ORDER 13423 Strengthening Federal Environmental, Energy, and Transportation Management

AFI 32-7042  
40 CFR parts 260-272

AFI 32-7086, 32-7080  
EPCRA—Emergency Planning and Community Right-to-Know Act  
(42 U.S.C. 11001-11050)

AFI 32-7040  
Required tracking of HAPS/NESHAPS usage  
(42 U.S.C. 7412)

Required Air Emission Inventories: comply with Clean Air Act  
(42 U.S.C. 7401-7671q)

AFI 32-7020  
Restoration Transformation - SAF/IEE & AF/A7C pushing for change (OSD has criticized the Air Force's restoration data collection)



Hazardous Materials



AIR Quality



Cleanup





U.S. AIR FORCE

# EESOH-MIS

## "Single Face to the Shop Floor"

One Stop Shopping for all E, S, OH constraints and requirements on the defined "Work Unit"

The screenshot displays the EESOH-MIS application interface within a Microsoft Internet Explorer browser. The browser address bar shows the URL: <http://ursula.eesoh.com/eesoh/installation/process/processEdit.esoh?id=99900000101>. The application header includes the text "Welcome, Shop User. Mark's test shop SHOP. TEST INSTALLATION installation." and the date "February 20, 2006 (Week 8 / Day 51)".

The interface is divided into several sections:

- Navigation Menus:** On the left, there are several tree-view menus: "Home" (containing EESOH Home, Work Basket, Reports), "Hazardous Materials", "Hazardous Waste", "Low-Level Radioactive Waste", "Shared Applications" (Administration, Installation Management), "Installation Management" (Process Authorization, Manage Shop, Manage Hazmat, Manage Shop Groups, Manage Other ICP, Manage Contracts, Manage Equipment, Manage Locations, Manage Organizations), and "Material Management".
- Home Page:** The main content area shows a "Welcome" message and a table with the following data:
 

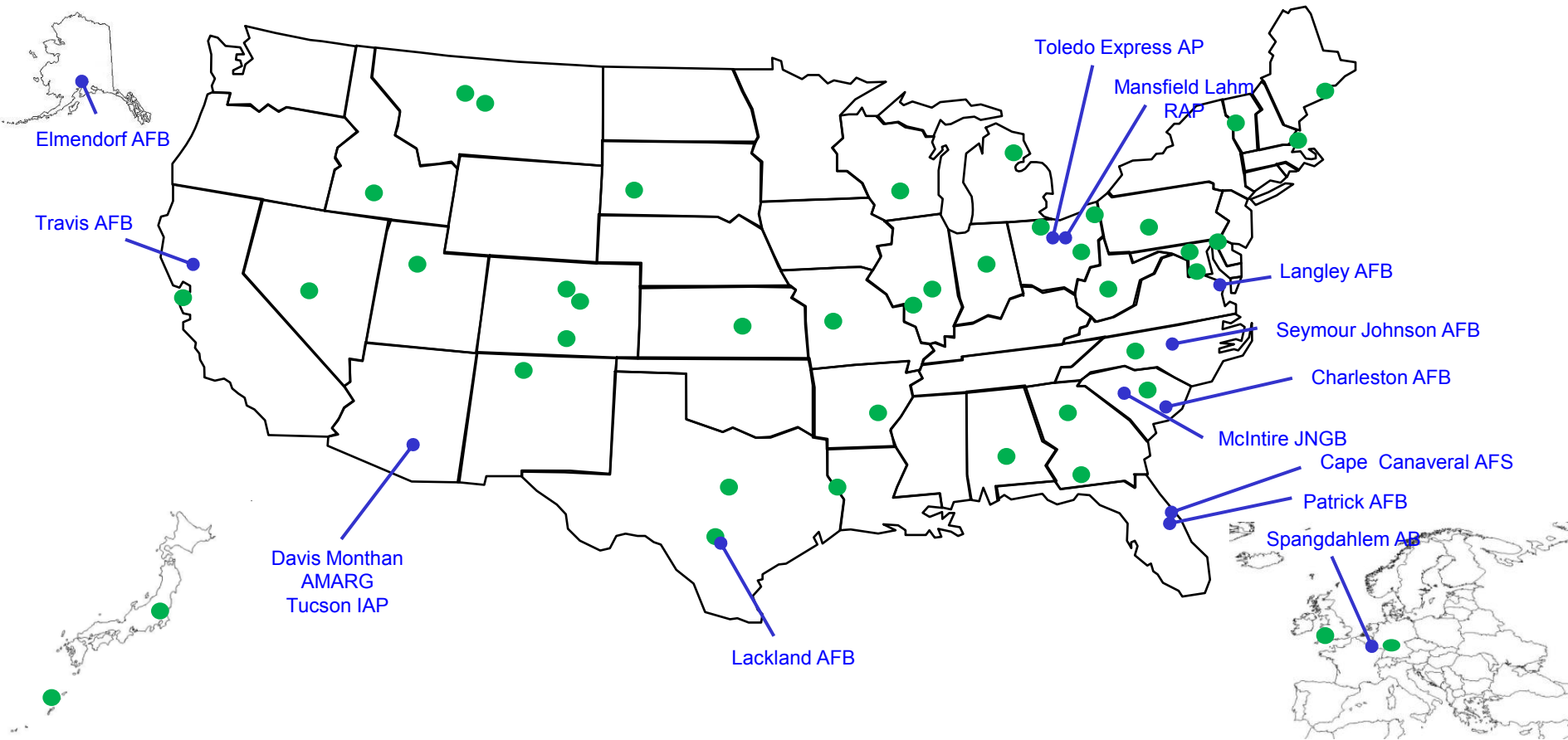
Type	Description
MSDS is not approved	Shop: Mark's Test H
Aspect Request	A New Aspect has
Data Request	A data addition re
Data Request	A data addition re
Data Request	A data addition re
Data Request	A data addition re
Data Request	A data addition re
- Edit Process Form:** The right side of the interface shows the "Edit Process" form. It includes a "Local Process Name" field with the value "Mark's Test Process", a "Status" of "Awaiting-Approval", and a "Shop Name" of "Mark's test shop". Below this are tabs for "Process", "Details", "Location", "Justification(s)", "Material Handling", "Material(s)", "Waste", "Exposure", and "Aspect/Hazard Inventory". The "Process" tab is active, showing fields for "Local Process Name", "Process Category" (Industrial), "Process Type" (Asbestos Work), and "Process Name" (Asbestos abatement, blasting). A text area for "Write a description of the Process" contains the text: "Put the lime in the coconut and shake it all up. Do the mashed potato." The "Process ID" is IAW10501000-- and the "CCS Process Id" is blank.

Work defined once and used for all ESOH media and functions



**U.S. AIR FORCE**

# Where We Are



*Integrity - Service - Excellence*



## ■ **Challenges**

- **Air Force Portal**
- **Continually updated multiple databases (EMIS, CCS, EESOH Migration Tool) until LIVE with EESOH-MIS**
- **Operation/navigation of new database (EESOH-MIS)**
- **Development of new management and work practices**
- **Development of Standardized Processes**

## ■ **Benefits**

- **More accurate the data, less duplication in EESOH-MIS**
- **EESOH-MIS offers flexibility and will adapt to Air Force operations**



**U.S. AIR FORCE**

---

# *Lessons Learned*

- **Change Is Difficult**
  - **“Change is the law of life. And those who look only to the past or present are certain to miss the future.” John F. Kennedy**
- **Data Quality Vital**
  - **Migrating legacy data**
  - **Ensuring Enterprise Data is Accurate**
- **Transformation Across the Air Force**
  - **Standardizing Business Processes**



**U.S. AIR FORCE**

---

# ***Benefits***

- **Reducing Toxic and Hazardous Chemicals under Executive Order (EO) 13423, *Strengthening Federal Environmental, Energy, and Transportation Management***
- **Supports ESOH MS**
- **EESOH-MIS allows total visibility across weapon systems and processes for reduction efforts**
  - **Reduction effort reporting visible at all levels**
    - **Installation, Major Command, Headquarters, OSD**
  - **Transparency**
  - **Efficiency**



U.S. AIR FORCE

---

*Questions*

# Questions

---

*Integrity - Service - Excellence*