The Air Program Information Management System (APIMS)

Frank Castaneda, III, P.E.
APIMS Program Manager
AFCEE/TDNQ
1. REPORT DATE  
**02 NOV 2011**

2. REPORT TYPE

3. DATES COVERED
**00-00-2011 to 00-00-2011**

4. TITLE AND SUBTITLE
**The Air Program Information Management System (APIMS)**

5. AUTHOR(S)

6. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)
**AFCEE/TDNQ, San Antonio, TX, 78226-2018**

7. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSOR/MONITOR’S ACRONYM(S)

10. SPONSOR/MONITOR’S REPORT NUMBER(S)

12. DISTRIBUTION/AVAILABILITY STATEMENT
**Approved for public release; distribution unlimited**

13. SUPPLEMENTARY NOTES
**Presented at the GreenGov Symposium, October 31 - November 2, 2011, Washington, DC**

14. ABSTRACT

15. SUBJECT TERMS

16. SECURITY CLASSIFICATION OF:

   - a. REPORT  
     **unclassified**
   - b. ABSTRACT  
     **unclassified**
   - c. THIS PAGE  
     **unclassified**

17. LIMITATION OF ABSTRACT
**Same as Report (SAR)**

18. NUMBER OF PAGES  
**13**

19a. NAME OF RESPONSIBLE PERSON

---

Standard Form 298 (Rev. 8-98)  
Prescribed by ANSI Std Z39-18
What is APIMS?

Air Program Information Management System:

- Sustainability of Enterprise air quality management system
  - Aspects and Impacts to Process
  - Auditing and Measurement
  - Goal Tracking and Achievement
  - GHG Tracking and Reporting
  - Air Emissions Inventory Preparation
  - Permit Management, Inspection and deficiency management.
  - Scalable to all Facilities
- GOTS – Air Force owned
  - Available to all Federal Agencies (no licensing costs)
Where is APIMS Today

APIMS User Community (DoD)

Where is APIMS Today

IT & Electronics – Session 7
Sustainability Management Using “GOTS” Technology

November 2, 2011
What is APIMS?

- Supports a Multi-Tiered Organization
- Supports reporting requirements of all enterprise management levels:
  - Supports facility Sustainability and compliance tracking and reporting
  - Provides Enterprise data analysis
  - Facilitates trend analysis
  - Supports cost of compliance assessments
What is Process Centric?

Work Driven accounting and reporting, allows emissions to be directly related to Mission Requirements, Weapons, Work Processes.
Why APIMS

- Data and Data System Consolidation:
  - Condenses 200+ different AEI formats to a single electronic format, Universal Air Emission Inventory
  - Eliminated over 15 stand alone Air Systems and countless spreadsheets.

- Data standardization:
  - Facilitates comparison analysis. “Apples to Apples“
  - Reduces data entry and maintenance
  - Drives uniformity in calculation methods

- Data quality improvement:
  - Standards based single repository
  - Reduced Keyboard entry errors

- Funding constraints:
  - Eliminates redundant and expensive IT systems
  - Reduces, training, data management, contractor assistance and error tracking cost
APIMS Benefits
Sustainability Management

- Air Emissions Calculations
  - Stationary, Mobile, GHG Sources
- Satisfies Air Requirements with Common Data Sets
  - Doing more with less
- Web Service Interfaces to Authoritative Sources
  - Ability to feed other systems
- Transparency to Mission
  - Who is generating what
  - What to reduce
  - Meets ISO 14001 reqs.
- Permit Management
  - Measure Aspects and Impacts
  - Compares achievements to Objectives & Goals
  - Inspections and auditing
Integrated online submittal of AEI for mgmt review

Dash board shows status by Command of Goal Achievement
APIMS Executive Dashboards
Drilling Into the Enterprise

- Transparency
- Mission Impact
- Multi Tier Drill in
  - Air Force
  - MAJCOM
  - Installation
  - Sources
- Identifies Reduction Targets

Dashboard displays, enterprise level criteria pollutants, MAJCOM contributions to total, MAJCOM Installation contributions to total, installation/source contributions to total
APIMS Executive Dashboards
GHG where are they coming from

- Transparency
- Mission
- Impact
- Reduction
- Targets
- Unsustainable processes

Dashboard displays, Facility criteria pollutants, CO by source contributions to total, Installation/Source contributions to total

IT & Electronics – Session 7
Sustainability Management Using “GOTS” Technology

APIMS
November 2, 2011
Dashboard reflects the status of goal to have all vehicles on Air Force property compliant with vehicle emissions testing.
Case Study: AF Transformation to: Standardized Air Quality Management

- **APIMS Enabled Streamlined Management**
  - Transparency from HQ to Installation level reporting
  - Standardized business processes and data across the enterprise
  - Scalable to all size installations
  - Provided millions $ in cost avoidance
  - Consolidated 15 systems into 1
  - Single authoritative source of all AQ information

- **Force Multiplier to Operations**
  - Continual improvement of multi business processes
  - Six Sigma approach
  - Creates value in data
  - Training standardized, what is done at smallest installation is reused in larger and vice versa “single source data entry”

- **Enterprise Management of all AQ Data**
  - Standardized algorithms and calculations
  - Standardized AEI and GHG Reports
  - Drill in directly to installation transactional data (Audit from afar)
Frank Castaneda, III, P.E.
AF Air Quality Subject Matter Expert and APIMS Program Manager, PMO
AFCEE/TDNQ

francisco.castaneda@us.af.mil,
(210) 395-8395 cell (210) 410-4361