



75TH AIR BASE WING

**EMAssist**

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# Implementation of the Air Program Information Management System (APIMS) Inspection Module

2009 Environment, Energy and  
Sustainability Symposium and Exhibition

## Report Documentation Page

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# OUTLINE

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2. Hill AFB Background
3. The APIMS Inspection Module
  - Feature Overview
  - Minimizing Risk and Cost
  - Maintaining Accurate and Complete Information
  - Detailed Features
  - Accessing Data/Performing Tasks
4. Summary

# WHAT IS APIMS?



> Managing compliance-related information is often challenging

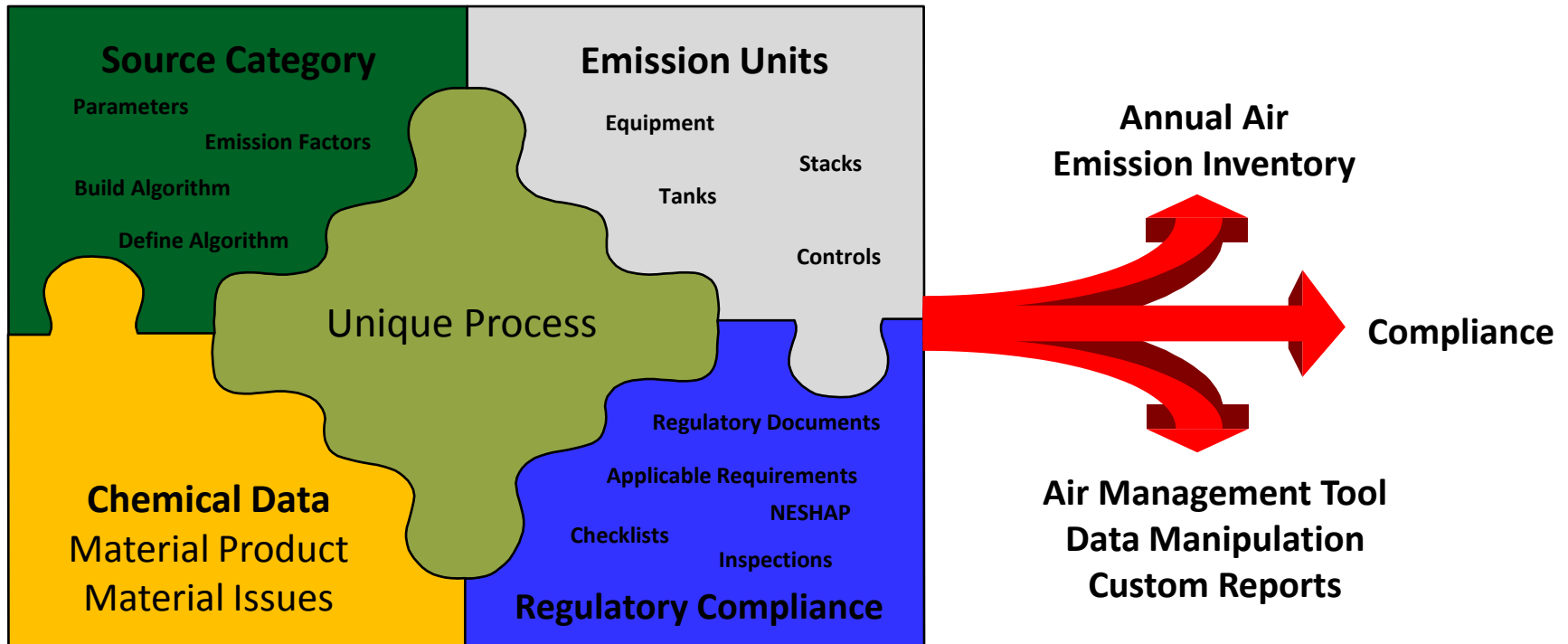
- Multiple, sometimes overlapping regulations
- Establishment of procedures for assessing compliance
- Extensive recordkeeping requirements



> The APIMS inspection module simplifies the process



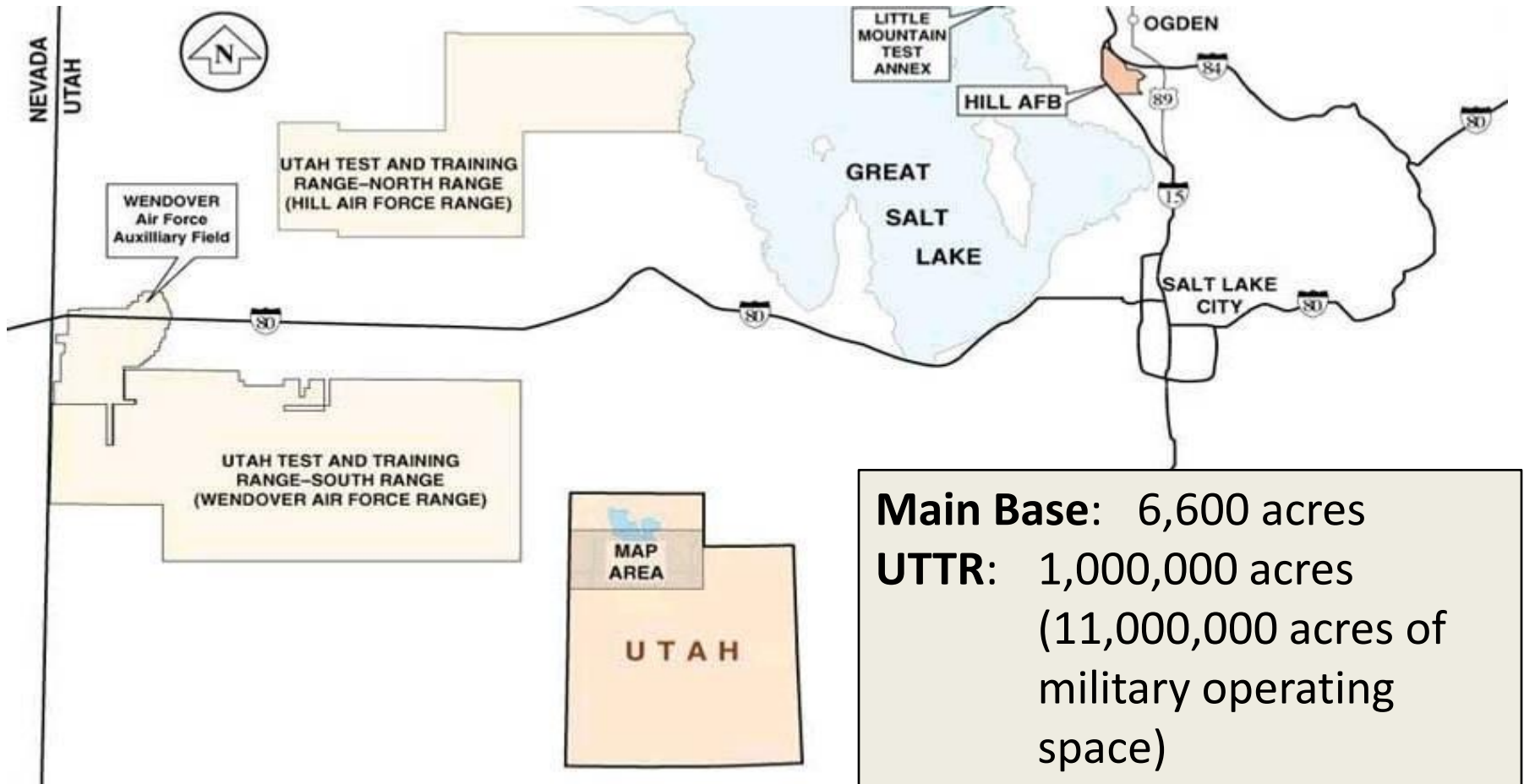
# WHAT IS APIMS?



# HILL AFB BACKGROUND



## Hill AFB—a Large Facility:



**Main Base:** 6,600 acres  
**UTTR:** 1,000,000 acres  
(11,000,000 acres of military operating space)

# APIMS INSPECTION MODULE:

## *Feature Overview*



### **The APIMS Inspection Module Offers:**

- > Web-based compliance management for environmental protocols (e.g. Air, hazmat, hazwaste, etc.)
  - Monitoring
  - Recordkeeping
  - Reporting
- > Inspection frequencies and results
- > Inspectable source/process/equipment inventory lists
- > Process-specific inspection checklists
- > Customizable reports



### **The APIMS Inspection Module Offers, Cont'd:**

- > Automatic email notifications of deviations and other actions performed in the system
- > Release limits
- > Consumption/usage data
- > Rolling totals
- > Corrective action tracking
- > Trend analyses
- > Default user preferences
- > User workbaskets

# APIMS INSPECTION MODULE:

## *Minimizing Risk and Cost*



## APIMS Inspection Module Reduces Risk by:

- > Maintaining accurate and complete information
  - Requirements
  - Processes and equipment
  - Checklists
  
- > Managing audits
  - Routine/non-routine
  
- > Daily monitoring of organization inspections
  - Prompt corrective action
  - Ensure required inspections completed

# APIMS INSPECTION MODULE:

## *Minimizing Risk and Cost*



### Results:

- > Reduced time required to manage inspections by over 70% (5,000 to 1,400 hours)
- > Reduced air quality permit deviations (alone) by 80%

Function	Approach, Hours	
	Old	New
Oversight		
Reporting	520	130
Managing Checklists, Sites, Inspection Data	804	220
Organization		
Reporting	3328	832
Managing Checklists, Sites, Inspection Data	385	182

# APIMS INSPECTION MODULE:

## Maintain Accurate and Complete Information



### Checklist Management:

- > Centralized inspection checklists for each process
- > Ensures correct monitoring and recordkeeping as regulatory requirements

ABRASIVE BLASTING OPERATOR/UEC CHECKLIST AEROSPACE NESHAP				
AQUIS NUMBER	BUILDING	MONTH/YEAR	OPERATOR/SUPERVISOR NAME	UEC NAME
OPERATOR or SUPERVISOR	1. Abrasive blast media usage is recorded (in pounds) on the media usage log each time media is added to blasting equipment. <i>II.B.2.a</i>			Operator/Supervisor Initials/Date/Time (Monthly)
	2. Equipment is maintained in good mechanical condition. (All maintenance actions performed on the equipment are documented using an AFMC Form 355, AFTO Form 244, Maintenance Log, FEMS, Trouble Call Log, or other suitable form) <i>II.B.1.b</i>			
	3. All abrasive blasting is done within the blast booth/enclosure and all air exits through the dust collection system. <i>II.B.3.b (3)</i>			
	4. *A differential pressure gauge is installed across the filter banks and is read and recorded on a log at least once per shift. (If pressure reading is outside of established limits, or there is an unexpected pressure drop, operation is shut down immediately and the UEC is notified.) <i>II.B.3.b 1</i>			
UEC	5. Blast media consumption is entered into a CEV data system (or sent to CEV using Air Reports folder) for this process by the 10 <sup>th</sup> of each new month using operator usage logs. <i>II.B.2.a</i>			UEC Initials/Date/Time (Monthly)
	6. A monthly visual emissions observation (VEO) is conducted and documented on this form. <i>II.B.3.a</i> Date: _____ Time: _____ Emissions Observed: Yes or No			
	7. A Method 9 evaluation is performed within 24 hours if emissions are observed during the monthly VEO. (opacity limit is 40% for Aerospace NESHAP blast booths) <i>II.B.3.a</i>			
	8. Process and equipment changes are pre-coordinated with CEV. (Submit a New Source Sheet and CEV will submit a 7-day notification of new equipment installation to UDAQ) <i>II.B.2.b</i>			
	9. All equipment malfunctions or limit exceedences are reported to CEV immediately. <i>II.B.3.b.2</i>			
	10. Operator/UEC checklists, all material usage logs, and records of all maintenance performed on this unit are available and maintained for five years. <i>I.S.1.a</i>			
	11. CEV was notified promptly of any potential Title V deviations. <i>I.S.2.c</i>			
	12. This log-entry documents that a visual inspection was performed to determine compliance with the items listed in the operator section of this Operator/UEC Checklist and that all information on the checklist is true, accurate, and complete. <i>I.S.1.a</i>			

# APIMS INSPECTION MODULE:

## Detailed Features



## Inspection Management:

### > Inspection records

- Data entered via inspection checklist screen
- Regulatory conditions that were met/violated are included
- Corrective actions are recorded and tracked

### > System can be configured to

- Generate inspections
- Route inspection through workflow

The screenshot shows the 'INSPECTION EVENT' entry screen in the APIMS system. The interface includes a menu bar (Action, Edit, Menu, Field, Record, Query, Help, Window) and a toolbar. The main form area is titled 'INSPECTION EVENT' and contains several sections:

- EVENT DEFINITION:** Includes fields for 'DEFINITION NAME' (CSQLSURFO NONAERO UEC MONTHLY), 'PROCESS ID' (CD11708110-8110), 'SERIAL NO', 'AIR EQUIP ID', and 'EVENT TYPE' (PERIODIC).
- DATES:** Fields for 'INTERVAL START DATE' (2008/10/01), 'INTERVAL END DATE' (2008/10/31), 'TARGET START DATE' (2008/10/01), and 'TARGET END DATE' (2008/10/31).
- INSPECTION PERFORMED DATE:** Set to 2008/10/01.
- INSPECTOR:** A dropdown menu.
- INSPECTION RESULTS:** Radio buttons for 'REPORTABLE FINDINGS', 'NON-REPORTABLE FINDINGS', and 'NO FINDINGS'.
- COMMENTS:** A text area for notes.
- STATUS:** A dropdown menu.
- INSPECTION TABLE:** A table with columns for 'QUESTION', 'Y/N', 'VALUE', 'COMMENTS', and 'CORRECT ACTION FLAG'. It contains several rows of inspection questions, such as 'Are all materials (topcoats, primers, solvents, etc.) issued through an EMC database (EMMS, EESOHM, etc.)?' and 'Are all HVPS w/avers in place and current for those activities where High Vapor Pressure Solvents are used? Reference I.B.25 in...'. Each row has a 'CORRECTIVE ACTION' button.

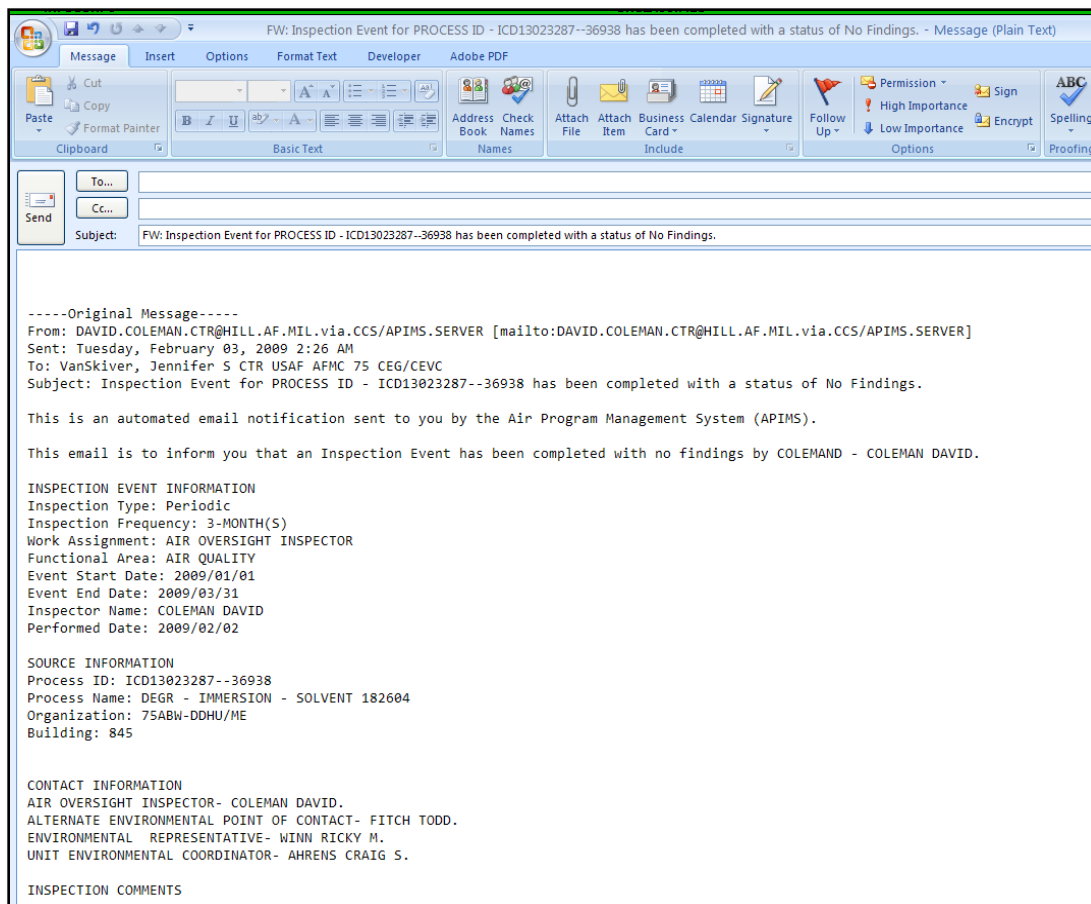
At the bottom, there are fields for 'Inspection Event Entry Date' (2008/10/18) and 'Inspection Event Revision Date' (2008/10/203).

# APIMS INSPECTION MODULE:

## Detailed Features



- > Auto-generated emails notify affected parties of inspection results
  - Increases visibility



# APIMS INSPECTION MODULE:

## Detailed Features



## 9 Types of Customizable Reports:

Home Tasks ▶ Reports ▶ Administration ▶ Community ▶ Help ▶

**Select Report:**

- Inspect Complete
- Inspect Complete (Spot)
- Inspect Findings
- Inspect In Progress
- Inspect Remain
- Inspect Remain and Complete
- Inspect Summary
- Inspect Summary Prct Complete
- Source List

**Functional Area:**

- SAFETY
- AIR QUALITY
- HAZARDOUS MATERIALS
- HAZARDOUS WASTE

**Facility:** ALL

**Frequency:** ANNUAL

**Period:**  Previous  Current

**Start Date:** 1/1/2009

**End Date:** 12/31/2009

**Organization:**

- 309MXW
- 388FW
- 419FW
- 526ICBMSW
- 75ABW

**Sub Organization:**

Select All Clear All

Populate Sub Orgs

Select All Clear All

Delete Sub Orgs

Show Report

# APIMS INSPECTION MODULE:

## *Accessing Data/Performing Tasks*



- > Wide array of filtering criteria allow users to access very precise data without need for manual manipulation
  - Filter on multiple criterion including event dates, equipment ID, environmental media type (e.g. air, waste, etc.), owning organization, user, etc.

A screenshot of the APIMS Query Window interface. The window title is "QUERY\_WINDOW". It features a menu bar (Action, Edit, Menu, Field, Record, Query, Help, Window) and a toolbar with various icons. The main area is divided into several sections:

- EVENT START DATE FROM** and **EVENT START DATE TO** (2009/02/26) and **INSPECTION FREQUENCY** (dropdown).
- PROCESS INFORMATION** table with columns: UNIQUE ID, PROCESS ID, BASE SPECIFIC ID, LOCAL PROCESS NAME, BUILDING NO, SOURCE CATEGORY CODE, UNIT ORG.
- FUNCTIONAL AREA** (dropdown menu showing HAZARDOUS MATERIALS and HAZARDOUS WASTE).
- RUG CODE** and **NOTICE CODE** (dropdown menus).
- WORK ASSIGNMENT** (dropdown menu showing UNIT ENVIRONMENTAL COORDINATOR).
- USER** (dropdown menu showing SWIGER ANTHONY).
- DIRECTORATE** (dropdown menu showing 30SEMKG, 30BMMKG, 30BMMXSG).
- EQUIPMENT INFORMATION** table with columns: SERIAL NO, AIR EQUIP ID, MODEL NO.
- SORT RESULTS BY** section with four criteria:
  - SORT CRITERIA 1: BASE SPECIFIC ID (dropdown), with radio buttons for ASCENDING (selected) and DESCENDING.
  - SORT CRITERIA 2: FUNCTIONAL AREA (dropdown), with radio buttons for ASCENDING (selected) and DESCENDING.
  - SORT CRITERIA 3: UNIT ORG (dropdown), with radio buttons for ASCENDING (selected) and DESCENDING.
  - SORT CRITERIA 4: (dropdown), with radio buttons for ASCENDING (selected) and DESCENDING.

At the bottom, there are buttons for "RESTORE DEFAULTS", "EXECUTE QUERY", and "CANCEL".

# APIMS INSPECTION MODULE:

## Accessing Data/Performing Tasks



- > Workbasket and default user settings enable users to access pertinent data quickly
  - Workbasket shows inspection items specific to a user
  - Default user settings reduce need to filter data manually

The screenshot shows the 'INSPECTION WORKBASKET [WORKBASKET]' window. It features a menu bar with options like 'MENU', 'FILTER OR SORT DATA', 'GO TO', 'REASSIGN TASK', 'VIEW/TASK NOTES', 'ASSIGN A PROXY', and 'VIEW STATISTICS'. Below the menu, there's a 'WORKBASKET' section with a welcome message: 'Welcome to your workbasket: SWIGER ANTHONY. No filters are applied.' There are four tabs: 'INSPECTIONS', 'REVIEW-IN-PROGRESS', 'NOTIFICATIONS', and 'NON-PERIODIC EVENTS'. The 'INSPECTIONS' tab is active, displaying a table with columns: 'PROCESS UNIQUE ID', 'BASE SPEC ID', '\*RIG CODE', '\*BLDG NO', '\*LOCAL PROCESS NAME', '\*UNIT ORG', 'PROCESS STATUS', '\*FUNCT AREA', and 'PROXY'. The table contains 15 rows of inspection data. At the bottom, there are four summary boxes: '# OF DISPLAYED INSPECTIONS' (51), '# OF DISPLAYED NOTIFICATIONS' (4653), '# OF DISPLAYED REVIEW-IN-PROGRESS INSPECTIONS' (0), and '# OF DISPLAYED NON-PERIODIC DEFINITIONS' (2250).

PROCESS UNIQUE ID	BASE SPEC ID	*RIG CODE	*BLDG NO	*LOCAL PROCESS NAME	*UNIT ORG	PROCESS STATUS	*FUNCT AREA	PROXY
7765	7765	G&S_OTHER	849	GSOL/SURFO - INSPECTION OF	DDHJME	ACT	AIR QUALITY	
7845	7845	G&S_OTHER	1377 and 2149	GSOL/SURFO - INSPECTION OF	849MUNS	ACT	AIR QUALITY	
7895	7895	G&S_OTHER	1269	GSOL/SURFO - INSPECTION OF	367TRSS	ACT	AIR QUALITY	
8110	8110	G&S_OTHER	891	GSOL/SURFO - INSPECTION OF	DISA	ACT	AIR QUALITY	
8113	8113	G&S_OTHER	914	GSOL/SURFO - INSPECTION OF	LGRF	ACT	AIR QUALITY	
8137	38537	RFC	891	ODC - APPLIANCE > 50 LBS	DISA	ACT	AIR QUALITY	
8686	L1005	HAZMAT	507	HM-CABINET-LHM005	LLPVC	ACT	HAZARDOUS MATE	
8687	L1002	HAZMAT	507	HM-CABINET-LHM002	LLPVM	ACT	HAZARDOUS MATE	
8688	L1001	HAZMAT	507	HM-CABINET-LHM001	LJOE	ACT	HAZARDOUS MATE	
8030	249	HAZMAT	843	HM-CABINET-HM249	528EMX/MXDPEK	ACT	AIR QUALITY	
12679	38891	ALLEQUIP_BOIL_AGG_BOIL_	891	ECOM - OF BOILER - DIESEL - S	DISA	ACT	AIR QUALITY	
100655	TH15	HAZWASTE_HV_ACCS	849	HM-ACC - TH15	DDHJMS	ACT	HAZARDOUS WAS	
100861	EM03	HAZWASTE_HV_IAP	514	HM-IAP - EM03	75CEG	ACT	HAZARDOUS WAS	
100993	EM01	HAZWASTE_HV_ACCS	514	HM-ACC - EM01	CEV	ACT	HAZARDOUS WAS	

# SUMMARY

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## The APIMS Inspection Module:

- > Reduces risk
- > Complies with AF IT security requirements
- > Is comprehensive
  - Monitoring, recordkeeping, reporting for air, hazmat, and hazwaste
- > Offers highly-tailored data filtering capabilities
- > Includes advanced user default settings



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