DOE-FIU SCIENCE & TECHNOLOGY WORKFORCE DEVELOPMENT PROGRAM

STUDENT SUMMER INTERNSHIP TECHNICAL REPORT-SUMMER 2010

June 2, 2010 to August 6, 2010

EM Management Systems

Principal Investigators:

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Florida International University

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Management Systems and Analysis Office Director (EM-4.1)
DOE-EM Headquarters

Philip Ammirato, Contract Management and Procurement
DOE-EM Headquarters

Florida International University Collaborator and Program Director:

Leonel Lagos, Ph.D., PMP®

ABSTRACT

The Office of Management Systems and Analysis (EM-4.1) was established as a part of the EM re-organization efforts in 2009. The mission of the office is to improve EM functions and management systems. Establishing, managing, and maintaining the Standard Operating Policies and Procedures (SOPP) is a part of the EM-4.1 mission. In addition, the office also has the responsibility to improve the Inspector General (IG) audits as well as the Government Accountability Office (GAO) audits for better business practices. Since DOE is on the GAO high risk list, GAO has made recommendations to improve DOE's business standards. Action items were developed from these recommendations and are tracked by the management office. EM-4.1 uses a Microsoft Access database to automatically track the assigned tasks.

The DOE Fellow, Serkan Akar, performed assignments such as establishing SOPPs and maintaining and managing procedures. He also conducted a thorough search of IG/GAO reports to determine the reasons that EM is on the "High Risk List." Lastly, he developed an action tracking tool to help manage the items for which EM-4.1 was responsible.

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1. INTRODUCTION

The Office of Environmental Management (EM) is a vital part of the Department of Energy (DOE). The EM mission is arguably the most important in the era of nuclear energy. About half a century ago, U.S. government officials launched a major nuclear weapon development project; in the years since, other nuclear energy projects were initiated. One unintended result of these projects is the need for extensive environmental remediation. Therefore, in 1989, the Department of Energy established the Office of Environmental Management (EM) to direct environmental restoration, waste management, technology development, and facility transition and management. In 2009, EM decided to re-organize to better serve its customers and the public. As a part of that re-organization, a new office called the Office of Management Analysis and Systems EM-4.1 (OMAS) was established. The mission of EM-4.1 includes but is not limited to ensuring the effective and efficient business and management improvements efforts. The EM organizational chart is shown in Figure 1.
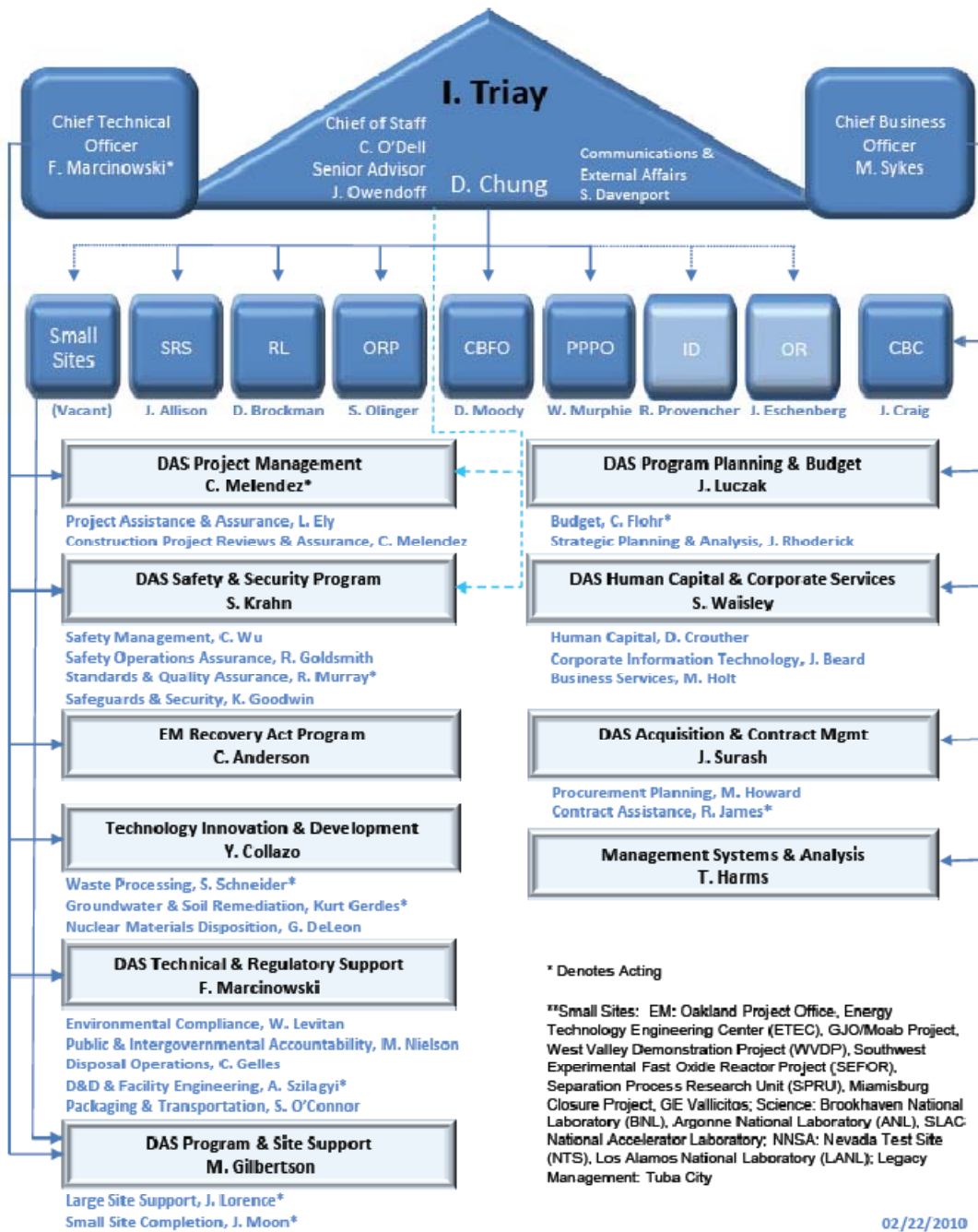
The EM Leadership Pyramid

I. Triay

Chief Technical Officer
F. Marcinowski*

Chief of Staff
C. O'Dell
Senior Advisor
J. Owendoff

D. Chung

Communications & External Affairs
S. Davenport

Chief Business Officer
M. Sykes

Small Sites	SRS	RL	ORP	CBFO	PPPO	ID	OR	CBC
(Vacant)	J. Allison	D. Brockman	S. Olinger	D. Moody	W. Murphie	R. Provencher	J. Eschenberg	J. Craig

DAS Project Management
C. Melendez*

Project Assistance & Assurance, L. Ely
Construction Project Reviews & Assurance, C. Melendez

DAS Safety & Security Program
S. Krahn

Safety Management, C. Wu
Safety Operations Assurance, R. Goldsmith
Standards & Quality Assurance, R. Murray*
Safeguards & Security, K. Goodwin

EM Recovery Act Program
C. Anderson

Technology Innovation & Development
Y. Collazo

Waste Processing, S. Schneider*
Groundwater & Soil Remediation, Kurt Gerdes*
Nuclear Materials Disposition, G. DeLeon

DAS Technical & Regulatory Support
F. Marcinowski

Environmental Compliance, W. Levitan
Public & Intergovernmental Accountability, M. Nielson
Disposal Operations, C. Gelles
D&D & Facility Engineering, A. Szilagyi*
Packaging & Transportation, S. O'Connor

DAS Program & Site Support
M. Gilbertson

Large Site Support, J. Lorence*
Small Site Completion, J. Moon*

DAS Program Planning & Budget
J. Luczak

Budget, C. Flohr*
Strategic Planning & Analysis, J. Rhoderick

DAS Human Capital & Corporate Services
S. Waisley

Human Capital, D. Crouther
Corporate Information Technology, J. Beard
Business Services, M. Holt

DAS Acquisition & Contract Mgmt
J. Surash

Procurement Planning, M. Howard
Contract Assistance, R. James*

Management Systems & Analysis
T. Harms

* Denotes Acting

**Small Sites: EM: Oakland Project Office, Energy Technology Engineering Center (ETEC), GJO/Moab Project, West Valley Demonstration Project (WVDP), Southwest Experimental Fast Oxide Reactor Project (SEFOR), Separation Process Research Unit (SPRU), Miamisburg Closure Project, GIE Vallicitos; Science: Brookhaven National Laboratory (BNL), Argonne National Laboratory (ANL), SLAC National Accelerator Laboratory; NNSA: Nevada Test Site (NTS), Los Alamos National Laboratory (LANL); Legacy Management: Tuba City

02/22/2010

Figure 1. EM Organizational Chart.

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2. EXECUTIVE SUMMARY

This research has been supported by the DOE-FIU Science and Technology Workforce Development Initiative, an innovative program developed by the US Department of Energy's Environmental Management (DOE-EM) and Florida International University's Applied Research Center (FIU-ARC). During the summer of 2010, a DOE Fellow intern (Mr. Serkan Akar) spent 10 weeks performing a summer internship at DOE Headquarters for the Office of Management Analysis and Systems (EM-4.1) under the supervision and guidance of Mr. Timothy Harms. The DOE Fellow's project was initiated in June 1, 2010, and continued through August 6, 2010. The purpose of the DOE-HQ work conducted during this internship was to gain experience in the field of management analysis and systems.

Mr. Akar assisted Mr. Harms with management issues such as standard operating policy procedures (SOPP), Inspector General and Government Accountability Office (IG/GAO) audit monitoring and analysis, and the action tracking system. Specifically, Mr. Akar performed assignments such as establishing SOPPs and maintaining and managing procedures. He also conducted a thorough search of IG/GAO reports to determine the reasons that EM is on the "High Risk List." Lastly, he developed an action tracking tool to help manage the items for which EM-4.1 was responsible.

3. INTERNSHIP DESCRIPTIONS

During the 10 weeks spent at DOE-HQ, the office director, Mr. Harms, assigned 3 projects to Mr. Serkan Akar. These projects included:

1. Standard Operating Policies and Procedures (SOPP) for the DOE-HQ offices
2. Examination of Inspector General / Government Accountability Office (IG/GAO) Audits
3. Management Analysis Action Tracking Tools (MAATT)

3.1 Standard Operating Policies and Procedures (SOPP)

When the DOE Fellow began his internship at the Office of Management Analysis and Systems (EM-4.1), the SOPPs were transferred from another EM office to EM-4.1. Mr. Harms assigned the DOE Fellow to establish the procedure to be used for developing SOPPs. First, Mr. Akar performed research about the SOPPs and then began to develop the SOPPs for the EM offices. The intern contacted some of the DOE offices that have established SOPPs for office procedures. The collected information and the samples gathered through research were integrated and a process for developing SOPPs was outlined. All the EM offices that were determined to establish, renew or update SOPPs were informed about the SOPP process. The steps below outline the SOPP process that was developed.

1. A report published by National Academy of Public Administration (NAPA) (Christopher Mihm, 2007) suggested that standard operating policies and procedures (SOPP) should be identified for every function and the existing ones should be updated. It should also be a high priority to achieve excellence (Christopher Mihm, 2007).

   Developing an SOPP includes the following steps:
   - Each Deputy Assistant Secretary or Office Director (DAS/OD) identifies a function that needs an SOPP.
   - Office of Management and Analysis (OMA) reviews all proposed functions for new SOPPs and concurs on the need to generate respective SOPPs.
   - OMA creates a folder for each SOPP on an internal server (T:\OMA\SOPPs) and collects all the respective documents in designated folders.
   - Assigned SOPP administrator (Wayne Whitley, Serkan Akar) also keeps hard copies of SOPPs.
   - DAS/OD assigns a subject matter expert for the SOPP.
   - OMA provides standard templates to promote consistency across EM.
   - OMA provides staff/resources to assist the DAS/OD in the SOPP development.
   - A draft of SOPP gets developed.
   - DAS/OD reviews the draft SOPP for readiness to be presented to HQ officials and to the OMA.
   - OMA then distributes it for comments.
   - If an SOPP affects the field, the OMA will contact EM-3.

- The DAS/OD and OMA agrees on the full suite of proposed reviewers, including other HQ groups.
- OMA will collect the comments, forward them to the DAS/OD, and assist them in addressing the comments.
- If any controversy occurs in developing an SOPP or flow chart of the SOPP, an in-person meeting may be required.
- OMA collects concurrent input from the other organizations for each respective SOPP.
- OMA prepares an approval package.
- Unless otherwise prohibited by DOE orders, the lead DAS for each SOPP will be the approval authority. In rare cases when a non-concurrence on the package cannot be resolved, EM-2 will be asked to resolve the non-concurrence issue.
- OMA distributes the SOPP to the proper units upon approval.
- Since an SOPP is a dynamic item, the administrator keeps all the revisions, modifications and emails in the respective folders.
- OMA is also responsible for posting the SOPPs on the portal website.
- If new DOE policies are announced, OMA will work with the DAS/ODs to determine if any new SOPPs need to be established or if any existing ones require updating.

Mr. Akar created and organized a binder with final copies of existing SOPPs for quick access.

After the new SOPP process was outlined, all of the EM-4.1 employees had to be informed about the new process. Therefore, Mr. Akar prepared a PowerPoint presentation briefing and the presentation was used to brief the DOE EM employees; the slides can be found in the appendix section of the report.

3.2 Inspector General / Government Accountability Office Audits

The Office of Inspector General (IG) has a mission statement that is as follows:

> The mission of the FLRA Office of Inspector General is to be a catalyst for maintaining the efficiency and effectiveness of FLRA programs and operations. The goal of the Inspector General's work is to improve the management and conduct of FLRA administrative programs and operations by evaluating performance, processes and results and identifying ways to make programs and operations more effective and efficient and productive for Federal Agency and Federal Union employees.

> The primary objectives of the Office of Inspector General are:

> - To objectively evaluate the efficiency, economy, legality, and effectiveness with which FLRA organizational components carry out their management operations and program responsibilities.

- To assist FLRA management in carrying out their responsibilities by providing them with objective and timely information on the conduct of FLRA operations, together with the Inspector General's analysis, conclusions and recommendations.
- To use audits, investigations, reviews and evaluations as management tools to increase Government integrity and recommend improved systems, processes and operations to prevent fraud, waste, abuse, and mismanagement.
- To provide management and employees assistance with concerns and complaints dealing with systemic issues this could result in fraud, waste, abuse, and mismanagement.

The government of United States also has a Government Accountability Office that operates under the U.S. Congress. Its mission is as follows:

The U.S. Government Accountability Office (GAO) is an independent, nonpartisan agency that works for Congress. Often called the "congressional watchdog," GAO investigates how the federal government spends taxpayer dollars. The head of GAO, the Comptroller General of the United States, is appointed to a 15-year term by the President from a slate of candidates Congress proposes. Gene L. Dodaro became Acting Comptroller General of the United States on March 13, 2008, succeeding David M. Walker, who appointed him upon resigning. Mr. Dodaro will serve in this position until the President nominates and the Senate confirms a successor from a list of candidates proposed by the Congress.

Our Mission is to support the Congress in meeting its constitutional responsibilities and to help improve the performance and ensure the accountability of the federal government for the benefit of the American people. We provide Congress with timely information that is objective, fact-based, nonpartisan, non-ideological, fair, and balanced.

These two government offices issue audits to the departments that operate under the United States Constitution. The Department of Energy, on the other hand, operates under the U.S President. An organization chart is shown in Figure 2.
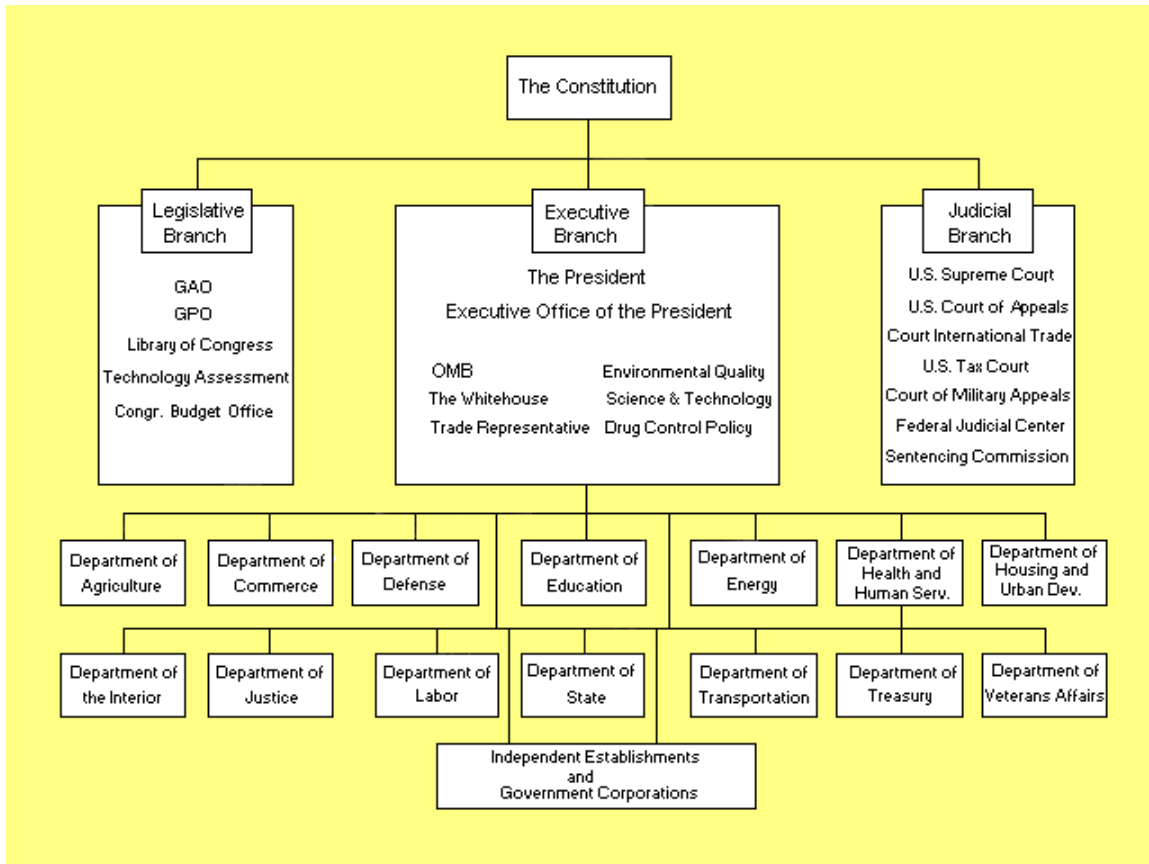
Figure 2. U.S. Organizational Chart.

These two offices establish a risk list based on each department's operation systems and history of spending U.S. tax dollars. DOE has been on the IG/GAO "High Risk List" since the early 1990s (Walker, 1999). Although DOE has improved its weak business practices, DOE still has additional milestones to reach in order to be removed from the GAO's high risk list.

To support DOE's efforts towards these milestones, Mr. Akar attended the IG/GAO meetings and assisted Mr. Philip Ammirato, who is responsible for the IG/GAO audits. The intern mostly attended the meetings as an observer; however, if any strong points were determined by the intern, they were written down to discuss with Mr. Ammirato. One specific idea that Mr. Akar developed was to identify which government agencies were placed on the "High Risk List" and were able to overcome their deficiencies and be removed from the list. As a result of this study, the Federal Aviation Administration (FAA) was found to be an agency that was placed on the high risk list and successfully came off of it.

3.3 Management Analysis and Systems Action Tracking Tool

As the technology advances, management tools become more sophisticated. The action tracking systems that the EM-4.1 utilizes is a Microsoft Access database. The action

items that need to be managed and analyzed are determined by the various offices and placed in the action tracking server. One of the functions of EM-4.1 is to ensure the completion and analysis of those action items once placed in the server. Figure 3 displays a screen shot from the tracking tool.
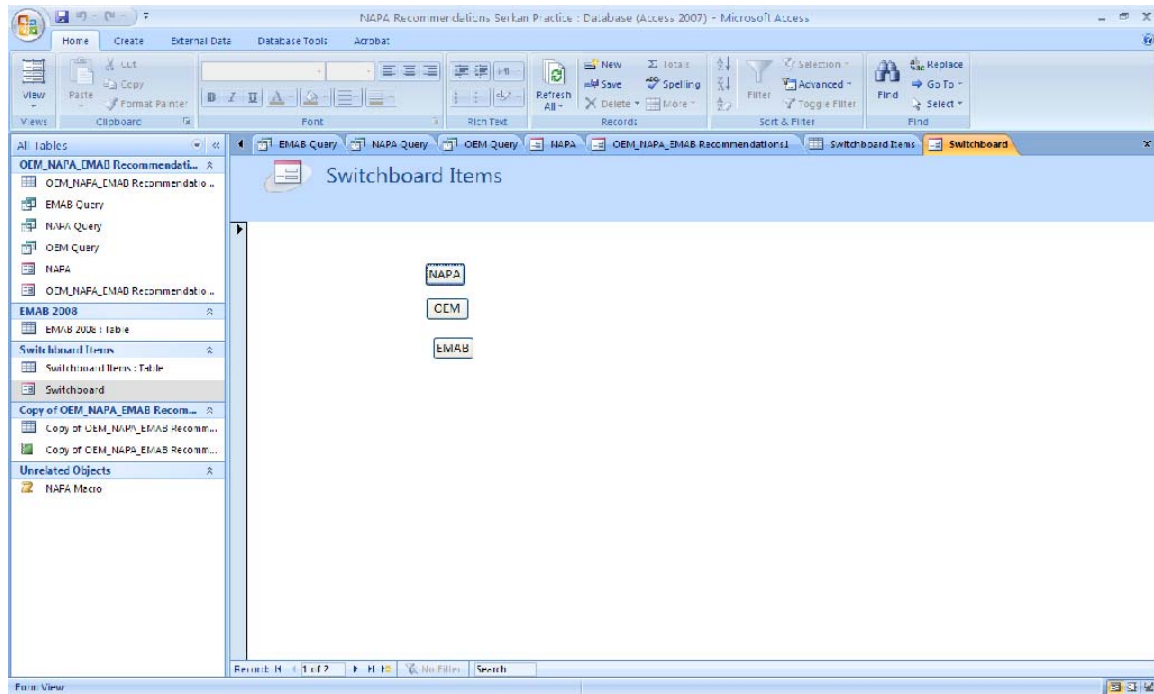

Figure 3. Action Tracking Screen.

As mentioned above, EM-4.1 is also responsible for the IG/GAO audits and the actions taken to correct the audit findings. Figure 4 exhibits one of the audit actions that were placed into the query and also the status of the action. As the responsible office progresses on that action, action status is changed and the respective field is updated.

Mr. Akar learned how to use the action tracking tool for future management references. EM-4.1 was assigned with managing new tasks; therefore, Mr. Akar added some new program features to the existing tool.
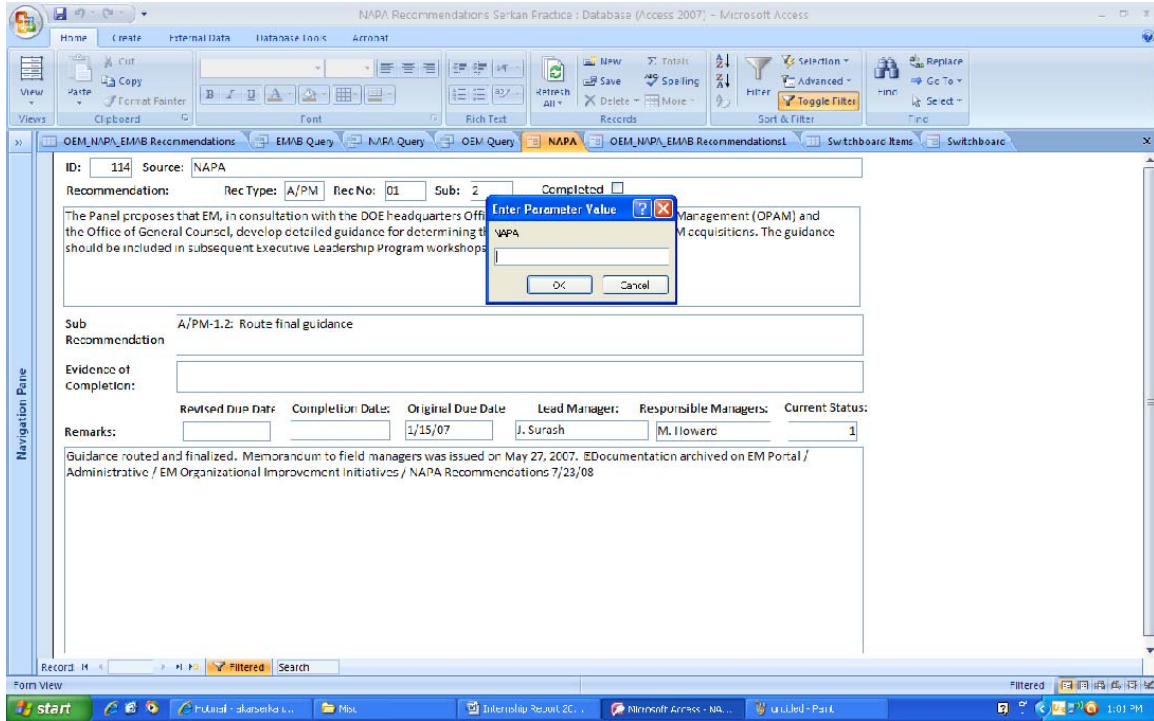
Figure 4. IG/GAO Audit Actions.

4. CONCLUSION

During the ten week internship period, Mr. Akar gained significant experience and knowledge of the management analysis and systems of DOE-EM. Mr. Akar has had 3 years of experience with DOE-EM, including hands-on research as well as management experience related to EM issues throughout the nation and facilities that EM manages. In addition, the summer 2010 internship experience also helped Mr. Akar to understand the challenges that EM faces concerning clean-up issues from the management perspective by attending higher level DOE management meetings.

5. REFERENCES

Christopher Mihm, M. C. (2007). *Office of Environmental Management; Managing America's Defense Nuclear Waste.* Washington, DC: National Academy of Public Administration.

Walker, D. M. (1999). *Major Performance and Management Challenges.* Washington, DC: Comptroller General of the United States.

APPENDIX

New Process for Standard Operating Policies and Procedures

PowerPoint Presentation for Briefing EM Employees

Standing Operating Policies and Procedures (SOPP)
by
Serkan Akar

Outline
❖ Introduction
❖ Why SOPP?
❖ Life Cycle of an SOPPs
❖ How Important is SOPP?
❖ Observations

U.S. Department of Energy
Office of Environmental Management

Introduction

What is Standing Operating Policy and Procedure (SOPP)?

❖A tool to improve the existing business model
❖Standardize the business (consistency)
❖Written by the Subject Matter Experts (SME)
❖Formalizes the business for employees.
❖Helps employees to know what to do in an unexpected situation
    ➢Caught off guard,
    ➢A failed operation,
    ➢Emergency cases,
    ➢Crisis.

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Why Do We Need an SOPP?

To have

❖An effective business
❖A planned escape route
❖A well-organized business
❖Efficiently trained new employees
❖Consistency in business
❖NAPA's recommendation (https://idoe.doe.gov/portal/server.pt/gateway/pdf)
❖A part of Best Practices Report (GAO)
❖ A part of EM Improvement initiative Program

U.S. DEPARTMENT OF ENERGY

A Life Cycle of an SOPPs

➢Development

➢Review

➢Finalize

➢Maintenance

➢Cancelling

Developing an SOPP

❖DAS/OD identifies a function and submits a request.

❖EM-4.1 will review all proposed SOPPs and concurs on the need revise existing SOPPs.

❖EM-4.1 creates a folder for each SOPP in T:\OMA\SOPPs and collects all the respective documents in designated folders.

❖The assigned SOPP administrator (Wayne Whitley, Serkan Akar) will keep hard and electronic copies of all SOPPs.

❖DAS/OD assigns a subject matter expert

❖EM-4.1 provides a standard template to promote consistency across EM

❖EM-4.1 provides staff/resources to assist the DAS/OD in the development

❖A draft of SOPP is developed by the affected office

Review Process of an SOPP

❖DAS/OD reviews the draft for HQ officials and to EM-4.1
❖EM-4.1 then distributes the drafted SOPP for comments
❖If an SOPP affects the field, EM-4.1 will coordinate with EM-3
❖The DAS/OD and EM-4.1 agrees on the full suite of proposed reviewers, including other HQ groups
❖EM-4.1 will collect the comments, forward them to the affected DAS/OD, and assist them in addressing the comments
❖ If any controversy occurs in developing an SOPP or flow chart of the SOPP, an in-person meeting may be required

Finalization (Approval) of an SOPP

❖EM-4.1 collects concurrent inputs from the other organizations for each respective SOPP
❖EM-4.1 prepares an approval package for the draft SOPP
❖Unless otherwise dictated by DOE orders, the lead DAS for each SOPP is the approval authority. In rare cases when a non-concurrence on the package cannot be resolved, EM-2 will be asked to resolve the non-concurrence issue
❖EM-4.1 distributes the SOPP to the proper organizations upon approval

Maintenance Process of an SOPP

❖SOPP is a dynamic item, the EM-4.1 SOPP administrator keeps all the revisions, modifications and emails in the respective folders

❖A binder is prepared for final copies of SOPP for a quick access

❖EM-4.1 is responsible for posting the SOPPs on the portal website

❖If new DOE policies are announced, EM-4.1 will work with the DAS/ODs to determine if any new SOPP needs to be established or any existing ones require updating

Cancellation Process of an SOPP
(Needs an Approval)

❖An SOPP can be only cancelled by an Subject Matter Expert (SME) or an DAS/OD

❖The cancellation must be in writing

❖If the proposed cancellation affects any other offices/concurrences, the notification must be issued before the cancellation

❖The SOPP administrator will have a Cancelled SOPPs folder in T:\OMA\SOPPs\Cancelled SOPPs and place it in the folder.

How important is SOPP ?

It is a part of

❖GAO/IG report that was issued by NAPA .

❖Best Practices Report published by GAO

❖EM improvement Initiative Program

❖Roles, Responsibilities , Authorities, Accountabilities (R2A2) Program

❖Reason for DOE-EM to be in the GAO high risk list

❖Please, now you answer my question "how important is SOPP?"

Observations about the SOPPs

❖SOPP is one of the major reason that EM is in the GAO high risk list however there are many offices/functions never developed even a draft of SOPP.

• EM-40 (Just an example)

❖There are offices/functions even trying to cancel an SOPP originally identified as part of the EM improvement Initiative.

• EM-41 (Just an example)

❖There are many deleted SOPPs

• For instance SOPP #1, 2, 11, 31, 39, 42, 46, 48