

**MINUTES OF THE MATERIALS CONTROL AND ACCOUNTABILITY
QUALITY PANEL MEETING
October 23-24, 2007**

INTRODUCTION

The Department of Energy (DOE) Office of Policy (HS-71) Materials Control and Accountability (MC&A) Quality Panel (QP) Meeting was conducted at the DOE Headquarters located in Germantown, MD, October 23-24, 2007.

EXECUTIVE SUMMARY

Meeting Objective: The goal of the meeting was to obtain broad input on the new draft manual and guide and input on some of the more complex MC&A policy issues deemed as important for policy functions in the months ahead. This was accomplished via invited presentations, briefings, and by holding in-depth discussions on proposed changes and select MC&A topics. Participants included a cross-section of DOE headquarters (HQ) and field offices, DOE contractor staff, MC&A and non-MC&A functions, S&S technical development staff, and site operations staff.

Presentations and Discussion of MC&A Policy Topics: Topics were presented by individuals in presentations, followed by QP attendee discussions. The topics included:

- **Overview of where Zero-base lined Policy is today** - Barbara Stone
- **Overview General Description of the Manual/New Approach to MC&A Policy** - Gary Kodman
- **Discussion - Authority for Changing Attractiveness Levels** – Jim Crabtree
- **Discussion - Impacts and Possible Approaches to Implementing the Draft Manual -Site Office Reviewers of Draft Manual-** Red team members-David Young, John Medlock
- **Oversight Perspective on Draft Manual** – D. L. Whaley
- **Discussion, Questions, Issues from EM, NE, and SC sites about Draft Manual and Guide-** Glenn Konzek, Ken Tuuri, Frank Healy
- **Safeguards First Principles Initiative (SFPI) Current Status/Results to Date; Thoughts on How SFPI will Work with the New Manual** – Amy Whitworth
- **MC&A Guide. Summary of Comments Received, Discussion of Key Issues, and Use of the Guide with the new Manual** – Gary Kodman

- **Status of the NMMSS Instruction Manual** – Ray Holmer
 - **Consolidation of Nuclear Materials** – Karl Goodwin
 - **Discussion – Possible elimination of the use of the term “safeguards” in domestic safeguards and security** – Jim Crabtree
 - **MC&A D&D Activities at K-25** - John Medlock
 - **Quality Panel Input on Training** – John Hyndman
 - **Discussion of the Technical Review of the DOE Graded Safeguards Table-**
Bart Ebbinghaus
 - **Discussions Regarding the Graded Safeguards Table (Classified discussion) -**
Bart Ebbinghaus
- End of Executive Summary.**

MEETING AGENDA

See Attachment 1.

LIST OF ATTENDEES

See Attachment 2. Participants included a cross-section of DOE HQ and field offices, DOE contractor staff, MC&A and non-MC&A functions, and site operations staff.

LIST OF PRESENTATIONS

See Attachment 3.

DISCUSSION OF OLD AND NEW BUSINESS

Introductions

Mr. Jim Crabtree (Office of Policy) opened with the introduction of himself and welcomed the MC&A Quality Panel participants and explained the logistics of the meeting.

Overview of where Zero-base lined Policy is today - Barbara Stone

Barbara Stone, Director, Office of Security Policy, gave opening remarks and briefed with slides on how we arrived at the ongoing Zero-base line policy rewrites of all the DOE 470 series manuals. The new manuals will tell what is required, not how to implement. The approach is having field input by placing members on the development and review (red) teams and emphasis on defining the requirements that are needed and the driver(s) for the requirements.

Overview General Description of the Manual/New Approach to MC&A Policy - Gary Kodman

Gary Kodman briefed with slides on the status of the draft MC&A manual. The writing team found that there were requirements that came out of the original manual that do not belong necessarily in MC&A and these are placed in a “parking lot “ for issues which still need to be dealt with. A problem that the team is tackling is the performance metrics which is deemed subjective and therefore there must be proven MC&A effectiveness from these metrics. Participants are asked to send comments on the draft manual back to Ken Byers and Vince DeVito by November 21st

Discussion - Authority for Changing Attractiveness Levels – Jim Crabtree

Jim Crabtree evoked discussion with slides on how to handle the changing of attractiveness levels at a receiving site. It was decided that this was an issue that wasn't applicable to all sites and that having certification for those who categorize material was not a good idea due to legal issue for certification programs. This issue may be looked at again after the new Graded Safeguards Table is issued. It was agreed that non mandatory training on how to apply the new Graded Safeguards Table would be encouraged.

Discussion - Impacts and Possible Approaches to Implementing the Draft Manual -Site Office Reviewers of Draft Manual- Red team members-David Young, John Medlock

David Young discussed his view on the new draft manual. Before sites did MC&A out of compliance rather than doing what is effective and efficient and the new draft allows the site to be more responsible and effective without being intrusive on operations when doing inventories.

John Medlock discussed his view on the new draft manual. Processes that you perform by plan, upfront work, but what are you gaining in value if any by doing the process. We need to be more cost effective and more efficient, while still maintaining a good MC&A plan.

Oversight Perspective on Draft Manual – D. L. Whaley

D.L. Whaley discussed his view on the new draft manual. There needs to be a tool, evaluation criteria, to make the performance metrics to the requirements in the appendix. If a performance metric repeats a requirement in the manual then it doesn't need to be in the appendix.

Discussion, Questions, Issues from EM, NE, and SC sites about Draft Manual and Guide- Glenn Konzek, Ken Tuuri, Frank Healy

Glenn Konzek, Ken Tuuri, Frank Healy, Gerry Griffin discussed problems with the implementation of the new manual:

- We would need to justify why it is in the MC&A plan.
- It's not driven by upper level management and they want know what the basis for doing the MC&A is.
- The new draft manual will make surveys very hard to do and doesn't address the handling of waste.
- The cost up front to change current MC&A plans would be expensive and you don't know what the return will be on the investment.
- Although we would have flexibility for DOE to safeguard their materials, are we giving line management the tools to work with to be successful?
- How will this affect performance ratings for contractors and cost awards?

Safeguards First Principles Initiative (SFPI) Current Status/Results to Date; Thoughts on How SFPI will Work with the New Manual – Amy Whitworth

Amy Whitworth briefed with slides on how SFPI is working at the test bed sites of Y-12 and NTS. The most important aspects are that the SFPI was implementable, inspectable, and measurable. The measuring effectiveness of the MC&A plan could also provide information in regard to risk management and tangibly what the risk is when tailoring for efficiency in the MC&A Plan. In terms of protecting material, why do we do what we do and what do we get for it.

The NNSA Implementation panel will be held October 25th to go more in depth on the SFPI and tools to evaluate it.

MC&A Guide. Summary of Comments Received, Discussion of Key Issues, and Use of the Guide with the new Manual – Gary Kodman

Gary Kodman briefed with slides on how we have moved from the current manual to the draft guide in which MC&A is going to supplement the new draft manual and catch up the new generation of MC&A professionals. The discussion of the MC&A terms did not come to a conclusion for specific terms. The following were discussed: simulation, innocent cause, authorized location; waste, credible rollup, and safeguards authorization basis.

It was asked that the comments for the draft guide be submitted by November 21 as well as those for the MC&A terms. The MC&A terms will be handled in the rewrite of the 470.4-7 manual.

Status of the NMMSS Instruction Manual – Ray Holmer

Ray Holmer briefed on the new Users Manual for NMMSS and the upgrade of the software system that has been ongoing. The upgrade of software is 3/5 done and will be finished Dec 2008. The Users Manual is scheduled to be published to the user community in April 2008 with a review by the users between January and March 2008. This document is not going to be in RevCom.

Consolidation of Nuclear Materials – Karl Goodwin

Karl Goodwin briefed with slides on how Environmental Management is striving to reduce the number of facilities storing special nuclear materials (SNM). There is a Nuclear Materials Disposition & Consolidation Coordination Committee (NMDCCC), which was formed in 2005. The committee reviews plans given by line management and makes sure to tackle the legal, NEPA, and public relations issues when doing movements to consolidate materials. The vision at this time is to reduce Category I Facilities by half of what is currently used.

Discussion – Possible elimination of the use of the term “safeguards” in domestic safeguards and security – Jim Crabtree

Jim Crabtree evoked discussion with slides about the elimination of the term “safeguards” in the safeguards and security community. The discussion was very brief and because of use of the term in the IAEA, NRC, and CFR the idea was unanimously declined. The use of the term “safeguards” will continue to be used.

MC&A D&D Activities at K-25 - John Medlock

John Medlock briefed with slides on the K-25 building and how difficult the process is to execute the demolition and still keep doing the MC&A plan. They are documenting the process for their D&D of this building which is expected to be completed in 2012. The issue of best practices was discussed and that it is the people aspect that drives safety and costs up. Next, the K-27 building in a similar fashion to be completed between 2014 and 2015. It was suggested that a D&D guide be produced on MC&A for facilities undergoing decommissioning with lessons learned based on the experiences of those who had gone through the process.

Quality Panel Input on Training – John Hyndman

John Hyndman briefed with slides on the path forward for the National Training Center. The participants were asked what courses were needed and how to get the courses to those who need them (i.e. mobile training team, simulation facility). It was discussed how the analysis of data for safety and security differ.

A Task Analysis for NDA training was being held on October 25th in conjunction with this meeting to get input from the MC&A community.

Discussion of the Technical Review of the DOE Graded Safeguards Table and Regarding the Graded Safeguards Table -Bart Ebbinghaus

Bart Ebbinghaus briefed with view graphs for his presentations on the technical study of the graded safeguards table and the recommendations and then the more in depth classified discussion of the graded safeguards table. Because of the sensitivity of the material presented, the OUO and classified view graphs will not be distributed with the minutes.

It was announced by Cathy Key announced that NNSA will be holding a meeting at the Nevada test site on the Graded safeguards table November 14-15, 2007.

Meeting Adjourned

**Agenda for MC&A Quality Panel Meeting
DOE HQ, Germantown, MD**

Tuesday October 23, 2007

Room: E-401

- 8:30 AM Meeting Overview, Logistics, and Introductions – Jim Crabtree
- 8:50 AM Opening Remarks Barb Stone - Director, Office of Security Policy
- 9:15 AM Overview General Description of the Manual/New Approach to MC&A Policy - Gary Kodman (for Vince DeVito)
- 10:00 AM Authority for Changing Attractiveness Levels –Jim Crabtree
- 10:10 AM Break
- 10:45 AM Impacts and Possible Approaches to Implementing the Draft Manual – Discussion by Red Team - Site Office Reviewers of Draft Manual; Tom Williams, David Young, John Medlock
- 11:15 AM Oversight Perspective on Draft Manual – D. L. Whaley
- 11:45 AM- 1:15 PM Lunch
- 1:15 PM Discussion, Questions, Issues from EM, NE, and SC sites about Draft Manual and Guide- Glenn Konzek, Ken Tuuri, Frank Healy
- 2:00 PM Safeguards First Principles Initiative (SFPI) Current Status/Results to Date; Thoughts on How SFPI will Work with the New Manual– Amy Whitworth
- 2:50 PM Break
- 3:20 PM MC&A Guide. Summary of Comments Received, Discussion of Key Issues, and Use of the Guide with the new Manual – Gary Kodman
- 4:40 PM Adjourn

**Agenda for MC&A Quality Panel Meeting
DOE HQ, Germantown, MD**

Wednesday October 24, 2007

Room: E-401

- 8:30 AM Summary of Tuesday's activities
- 8:45 AM Status of the NMMSS Instruction Manual – Ray Holmer
- 9:00 AM Consolidation of NM – Karl Goodwin
- 9:15 AM Discussion – Possible elimination of the use of the term “safeguards” in domestic safeguards and security – Jim Crabtree
- 9:30 AM Break
- 10:00 AM MC&A D&D Activities at K-25 - John Medlock
- 10:40 AM Quality Panel Input on Training – John Hyndman
- 11:15 AM – 1:00 PM Lunch
- 1:00 PM Discussion of the Technical Review of the DOE Graded Safeguards Table (Bart Ebbinghaus)
- 1:50 PM Break
- 2:20 PM Discussions Regarding the Graded Safeguards Table (Bart Ebbinghaus)
- 3:50 PM Adjourn - Quality Panel Meeting

**MC&A Quality Panel Meeting List of Attendees
October 23-24, 2007**

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List of Presentations

- 1. *Material, Control and Accountability Quality Panel Meeting October 23-24, 2007*, presented October 23, 2007, Barbara R. Stone (DOE, HS-70), slides.
- 2. *Overview of the MC&A Manual*, presented October 23, 2007, Gary Kodman (DOE, HS-61), slides.
- 3. *Authority for Changing Attractiveness Level*, presented October 23, 2007, Jim Crabtree (DOE, HS-61), slides.
- 4. Safeguards First Principles Initiative, presented October 23, 2007, Amy B. Whitworth (NNSA/NA-72), slides.
- 5. *Overview of the MC&A Guide and MC&A Terms*, presented October 23, 2007, Gary Kodman (DOE, HS-61), slides.
- 6. *NMMSS DOE Users Manual Update*, presented October 24, 2007, Ray Holmer (DOE HS-1.22), Word Document.
- 7. *Nuclear Materials Disposition & Consolidation Coordination Committee*, presented October 24, 2007, Karl Goodwin (DOE, EM-3.1), slides.
- 8. *Elimination of the Use of the Term Safeguards (General Discussion)*, presented October 24, 2007, Jim Crabtree (DOE, HS-61), slides.
- 9. *D&D of the K-25 Building at the East Tennessee Technology Park*, presented October 24, 2007, John E. Medlock (DOE, ORO), slides.
- 10. *MC&A Training Overview*, presented October 24, 2007, John Hyndman (DOE, HS-51), slides.