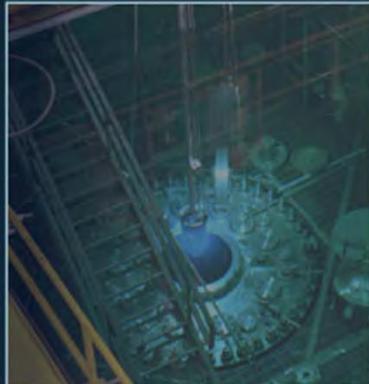


ACCURACY

PERFORMANCE

ACCOUNTABILITY

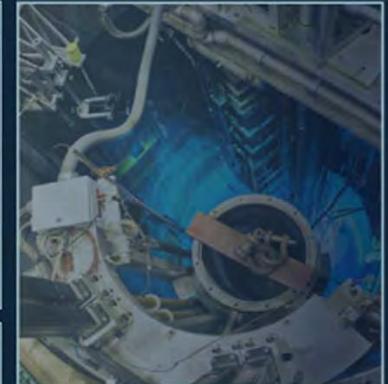


THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS  2013

USERS ANNUAL TRAINING MEETING

 MAY 20-23, 2013 - ST. LOUIS, MISSOURI 



FUNDAMENTALS

INPUTS (I) PROCESS (P) OUTPUTS (O)

Mister "T" McDonnell

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

N M M S S  2013

USERS ANNUAL TRAINING MEETING

✧ MAY 20-23, 2013 - ST. LOUIS, MISSOURI ✧



NNSA



NRC and DOE

One System Two Sets of Rules

- Input (I) data using the same forms with slightly different information
- Processed (P) in the same database
- Output (O) report results based on needs of the customer
- Highlight reporting differences between NRC and DOE



TRANSACTIONS

- Transactions
 - (I) Electronic or hard copy
 - *Update on NMMSS Fillable Forms and SAMS 8.0* (Wednesday 22, 14:00)
 - (P) NMMSS edit check
 - (P) Monthly close-out
 - (O) Reports generated
 - TJ-001X – Daily Transaction and Errors
 - TJ-045 – Shipments, Receipts, Gains, and Losses
 - TJ-011B – Transactions by Material Type and Facility

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMSS)

NMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



741

DOE/NRC FORM 741
(8-2011). Previous editions are obsolete.
 MANDATORY DATA COLLECTION
 AUTHORIZED BY 10 CFR 30.40, 50, 70, 72, 74, 75, 150,
 Public Laws 85-703, 93-438, 95-61

**U.S. DEPARTMENT OF ENERGY
 AND
 U.S. NUCLEAR REGULATORY COMMISSION**

APPROVED BY OMB: NO. 3160-0003 EXPIRES: 06/31/2014

Estimated burden per response to comply with this mandatory collection request: 1 hour and 15 minutes. This information is required for IAEA accounting reports that show changes in inventory of nuclear materials. Send comments regarding burden estimate to the Information Services Branch (7-5 P53), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by Internet e-mail to infocollections@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NRC-10002, (2150-0003), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NUCLEAR MATERIAL TRANSACTION REPORT

1. SHIPPER'S NRC		2. RECEIVER'S NRC		3. TRANSACTION NO.		4. CONNECTION NO.		5. PACKAGING CODE		6. ACTION CODE		7. DECLARATION CODE (Followed by a serial number)	
8. NAME AND ADDRESS OF SHIPPER		9. LICENSE NO.		10. NAME AND ADDRESS OF RECEIVER		11. LICENSE NO.		12. NO. OF DATA LINE		13. SHIPPED FOR ACCOUNT OF		14. NATURE OF TRANSACTION	
15. ATTENTION		16. ATTENTION		17. ATTENTION		18. ATTENTION		19. ATTENTION		20. ATTENTION		21. DEFINITION OF CODES	
22. TRANSFER AUTHORITY - CONTRACT, RM DRAFT, OR ORDER NUMBER		23. REPORT OR IMPORT TRANSMITTAL LICENSE NO.		24. MATERIAL TYPE AND DESCRIPTION		25. REPORT OR IMPORT TRANSMITTAL LICENSE NO.		26. MATERIAL TYPE		27. CALCULATED NET WEIGHT		28. CALCULATED NET WEIGHT	
29. MISCELLANEOUS		30. CONCERN NOT ATTACHED		31. TOTAL GROSS WEIGHT		32. TOTAL VOLUME (Gross Volume Only)		33. NET DATE		34. SHIPPER		35. SHIPPER CONNECTION	
36. SHIPPER'S DATA		37. RECEIVER'S DATA		38. SHIPPER'S DATA		39. RECEIVER'S DATA		40. SHIPPER'S DATA		41. RECEIVER'S DATA		42. SHIPPER'S DATA	

WARNING: FALSE STATEMENTS IN THIS CERTIFICATE MAY BE SUBJECT TO CIVIL AND/OR CRIMINAL PENALTIES. NRC REGULATIONS REQUIRE THAT SUBMISSIONS TO THE NRC BE COMPLETE AND ACCURATE IN ALL MATERIAL RESPECTS. 18 U.S.C. SECTION 1001 MAKES IT A CRIMINAL OFFENSE TO MAKE A WILLFULLY FALSE STATEMENT OR REPRESENTATION TO ANY DEPARTMENT OR AGENCY OF THE UNITED STATES AS TO ANY MATTER WITHIN ITS JURISDICTION.

DOE/NRC FORM 741 (8-2011)



INVENTORIES

- Inventories
 - (I) Electronic or hard copy
 - (P) NMMSS edit check
 - (P) Facility reported versus NMMSS book
 - (P) Inventory reconciliation
 - (O) Reports
 - I-010E – Inventory Data Listing
 - I-027 – Inventory by Facility
 - I-027C – Inventory by Facility with Cost
- Material Summary Report (MSR) – Inventory and Material Balance M742 and 742C

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



MATERIAL BALANCE

■ Material Balance

- (I) Electronic or hard copy
- (P) NMMSS edit check
- (P) Reported versus Book
- (P) Reconciliation
- (O) Reports
 - M-742A – By Facility
 - M-742C – By Facility with Cost
 - M-742D – Reports vs. NMMSS Book Material Balance

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



INTERNATIONAL

■ International

- *Nuclear Material Import/Export Process and Requirements*
(Wednesday May 22, 08:30)
- *International Transit Matching Processes and Requirements*
(Wednesday May 22, 10:30)
- *Overview of Obligations Accounting* (Thursday May 23, 08:30)
- (I) Electronic or hard copy as part of 741
- (P) NMMSS edit check
- (P) Monthly close-out
- (O) Reports generated
 - IA-OBL-O5 – Obligation Summary Report

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

N M M S S  2013

USERS ANNUAL TRAINING MEETING

✻ MAY 20-23, 2013 - ST. LOUIS, MISSOURI ✻



FINANCIAL

■ Financial

- (I) Electronic or hard copy as part of 742C
- (P) After monthly/inventory reconciliation
- (O) Reports
 - TJ-045C – Transaction Detail for Shipments, Receipts, and Onsite Gains and Losses with Cost
 - FN-001 – Financial Inventory Summary
 - M-742C – Material Balance Report by Facility with Cost
 - I-027C – Inventory by Facility with Cost

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



AUTHORITY REFERENCE FILE

- Authority Reference File
 - (I) Contact Information, Contractor/Licensee
 - (P) Comp Code (741 block 26/27h.)
 - (P) License Authority
 - (P) Material Type – Alpha / Numeric (NRC / DOE)
 - (P) Project Number
 - (P) Reporting Identification Symbol (RIS)
 - (P) Edit checks
 - (O) Reports
 - D-002 – DOE Directory of RIS
 - D-003 – NRC Directory of RIS
 - D-015 – International Nuclear Facilities

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



RECONCILIATION REPORTS

REPORTS	DOE	NRC
M-742A – Material Balance Report By Facility		X
M-742D – Reports vs. NMMSS Book Material Balance		X
IA-OBL-O5 – Obligation Summary Report	X	X
TJ-011B – Transactions by Material Type and Facility		X
I-010E – Inventory Data Listing		X
A-200 – Summary of Ending Inventory Comparison	X	X
A-210 – Project Material Balance	X	
TJ-045 – Shipments, Receipts, Gains, and Losses	X	

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



REQUIREMENTS & REPORTING

■ DOE

- Requirement
 - DOE Order 474.2 Chg. 2 *Nuclear Material Control & Accountability*
- Reporting
 - *NMMSS User's Guide Rev. 2.0*
 - *D23 Personal Computer Data Input for DOE Contractors*

■ NRC

- Requirement
 - 10CFR40 Domestic Licensing of Source Material
 - 10CFR70 Domestic Licensing of Special Nuclear Material
- Reporting
 - NUREG/BR-0006, Rev.7 *Instructions for Completing Nuclear Material Transaction Reports*
 - NUREG/BR-0007, Rev.6 *Instructions for the Preparation and Distribution of Material Status Reports*
 - *D24 Personal Computer Data Input for NRC Licensees*

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



MATERIALS

MATERIAL	DOE	NRC	MATERIAL	DOE	NRC
Depleted Uranium	X	X	Litium 6	X	
Enriched Uranium	X	X	Plutonium 242	X	
Thorium	X	X	Americium 241	X	
Plutonium	X	X	Americium 243	X	
Natural Uranium	X	X	Curium 244	X	
Uranium in Cascade	X	X	Curium 246	X	
Uranium 233	X	X	Neptunium 237	X	
Plutonium 238	X	X	Tritium	X	
			Deuterium	X	
			Californium 252	X	

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



WEB

NNSA
National Nuclear Security Administration

U.S. DEPARTMENT OF ENERGY

Our Mission About Us Media Room Federal Employment Blog

Nuclear Materials Management & Safeguards System

Home > About Us > Our Programs > Nuclear Security > Nuclear Materials Management & Safeguards System

WWW.NNSA.ENERGY.GOV/NMMSS

NMMSS U.S. Department of Energy / U.S. Nuclear Regulatory Commission
Nuclear Materials Management & Safeguards System

ATTENTION
On October 1, 2010 the NMMSS program moved to the National Nuclear Security Administration's (NNSA) Office of Materials Integration (NA-73). New mailing address information can be found under "NMMSS Contacts."

SPECIAL ANNOUNCEMENT
THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)
NMMSS 2013

Learn more

- [NMMSS Information, Reports & Forms](#)
- [International](#)
- [Training](#)
- [SAMS Overview](#)

Related Links

[Press Releases](#)

Headlines

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS 2013

USERS ANNUAL TRAINING MEETING

MAY 20-23, 2013 - ST. LOUIS, MISSOURI



TRAINING

- *NMMSS Resources* (Monday May 20, 11:45)
- NMMSS NRC Training Course
 - Sept 10-13, 2013 Germantown, MD
 - Dec 3-5, 2013 Germantown, MD
- DOE MCA-112 NMMSS I
 - Sept 10-13, 2013 Germantown, MD
- DOE MCA-212 NMMSS II
 - June 11-13, 2013 Idaho Falls, ID

THE NUCLEAR MATERIALS MANAGEMENT AND SAFEGUARDS SYSTEM (NMMSS)

NMMSS  2013

USERS ANNUAL TRAINING MEETING

✧ MAY 20-23, 2013 - ST. LOUIS, MISSOURI ✧



QUESTIONS?