



NMMSS News

Nuclear Materials Management & Safeguards System

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MARK YOUR CALENDAR

NMMSS 2015 Annual Users Training Meeting

The Nuclear Materials Management and Safeguards System (NMMSS) 2015 Annual Users Training Meeting will be held May 11–14, 2015, in Las Vegas, Nevada. The NMMSS is the U.S. Government's official information system containing current and historical accounting data and other related nuclear material information collected from both government and commercial nuclear facilities. The information serves a critical role in aiding risk-informed decision making in areas related to regulatory functions, international programs, materials management, program management, and financial management.

The NMMSS 2015 four-day event provides a unique training and information sharing opportunity for Nuclear Regulatory Commission (NRC) licensees, the Department of Energy (DOE)/National Nuclear Security Administration (NNSA) Federal and contractor organizations, and other domestic and international entities with responsibility for tracking and reporting nuclear materials.

The planned NMMSS 2015 agenda focuses on:

- Basic and specialized training to meet regulatory requirements associated with nuclear material reporting,
- Regulatory updates relevant to nuclear material reporting,
- Programmatic and regulatory issues of importance to the NRC licensees and DOE/NNSA contractors,
- Specialized breakout sessions,
- One-on-one consultations with, and technical support by, NMMSS staff, including a hands-on software orientation,
- Industry roundtable discussion to share ideas and identify opportunities for improvement, and
- Topical presentations on emerging domestic and international developments.

An important aspect of the NMMSS 2015 Annual Users Training Meeting is that the participants will receive a certificate for successfully completing the training sessions.

There is no registration fee to participate.

For more information and to register for this important event, including a draft agenda, please visit <http://70.91.69.161/nmmss2015/>. A limited block of rooms has been booked at the government per diem rate on a first come first serve basis. Early registration and room reservation is highly recommended. Meanwhile, please contact Pete Dessaulles (DOE/NNSA) Pete.Dessaules@NNSA.doe.gov or Brian Horn (NRC) Brian.Horn@NRC.gov with any questions or topics of significance to your organization that you would like addressed at the NMMSS 2015 Annual Users Training Meeting.

NMMSS News is sponsored by the Department of Energy and the Nuclear Regulatory Commission.

NRC Reconciliation – Material Status Reports Are Due Soon!

NRC regulations require licensees to report to NMMSS if they possess one gram or more of special nuclear material (SNM) (plutonium, uranium-233, or uranium-235 contained in enriched uranium) or one kilogram or more of foreign-obligated source material (natural uranium, depleted uranium, or thorium). Most NRC licensees report to NMMSS by calendar year. This means that after the New Year, the NMMSS program typically enters the busy season for NRC licensee reconciliations. In anticipation of a busy reporting period, below are some tips to help facilitate a smooth reconciliation. As always, NMMSS analysts are available to provide technical assistance by phone or email. See the Points of Contact at the end of this newsletter for a listing of the NMMSS analysts.

1. All Government-owned material is reportable per NUREG/BR/0006, Rev. 7, including all SNM, source material, and other materials listed in the Reportable Elements and Isotopes section of the NMMSS User's Guide.
2. For non-government-owned material, licensees are required to submit a Material Status Report (MSR) when their facilities:
 - Possessed, shipped, or received one gram (≥ 0.5 g) or more of SNM during the reporting period (see the table below); OR
 - Possessed, shipped, or received one kilogram (≥ 0.5 kg) or more of foreign obligated source material (natural uranium, depleted uranium, or thorium – see the table below); OR
 - Imports or exports 1 kg (≥ 0.5 kg) or more of source material.
3. Fillable Forms 742 and 742C (recommended) are posted on the NMMSS website – <http://nnsa.energy.gov/aboutus/ourprograms/nuclearesecurity/nmmsshome/nmmssinfo/doenrcforms>.
 - The forms are also posted on the NRC website – <http://www.nrc.gov/reading-rm/doc-collections/forms>.

Material	Material Type	Reporting Unit (rounded up)	Weight that is Reported
Enriched uranium*	20	Whole gram	Element and isotope
Plutonium	50	Whole gram	Element and isotope
Uranium-233	70	Whole gram	Element and isotope
Plutonium-238	83	Tenth of a gram	Element and isotope
Depleted uranium	10	Whole kilogram	Element and isotope
Normal uranium	81	Whole kilogram	Element only
Thorium	88	Whole kilogram	Element only

***Assay Levels of Enriched Uranium (from NUREG/BR-0007, Rev. 6)**

Report enriched uranium by assay level (see below) on separate MBR forms.

- E-1** Greater than normal but less than 5%
- E-2** 5% or more, but less than 20%
- E-3** 20% or more, but less than 80%
- E-4** 80% or more

For regulatory questions, please contact Brian Horn, NMMSS NRC Project Manager, at 301-287-9129, brian.horn@nrc.gov.

Thank You for a Job Well Done!

The annual reconciliation of all 49 DOE/NNSA site inventories was successfully completed. The September 2014 processing period was closed by NMMSS on December 1, 2014. The reconciliation process involves comparing a site's material balance for all accountable nuclear materials with the book values in NMMSS as of September 30. In addition, foreign-obligated material balances must be compared with the information on the NMMSS IA-OBL-05 Obligation Summary Report. Many DOE/NNSA sites' material balances perfectly matched those in NMMSS; a few needed adjustments and clarifications. The DOE/NNSA sites provided quick and detailed responses to questions and information requests on the physical inventory listings and adjustments that were submitted so that the NMMSS staff could address and resolve any outstanding issues.

In addition, the NMMSS staff collected information from 39 DOE/NNSA sites following the September 2014 closing to update project numbers for FY 2015. Project numbers, which are tied to the DOE budget and reporting codes, provide important financial reporting, program ownership, and materials management information about DOE-owned nuclear materials in use at government and private-sector sites throughout the U.S. and in foreign countries.

The NMMSS program appreciates the support and cooperation received to assist in the completion of these critical annual milestones.

Upcoming NMMSS I Training Courses for DOE

The DOE NMMSS I (MCA-112) training course has been scheduled for **February 10-13, 2015**, at DOE Headquarters in Germantown, MD. This course is designed for personnel who have less than two years' experience in nuclear materials accounting.

The desired class size is 12 or less. A minimum of 6 is required to conduct the class. You may register for the class by contacting John Ballard at (301) 903-0092, or by email at John.Ballard@nnsa.doe.gov, and providing him with your name, nationality, job title, facility name, address, telephone number, and email address. Students must also register for the class with the National Training Center (NTC) at <https://ntc.doe.gov/default.aspx>. There are no training fees for DOE personnel or DOE contractors.

If interested, please contact John Ballard by January 31, 2015.



Upcoming NMMSS Training Courses for NRC

NMMSS training for NRC licensees and Federal employees is scheduled for **March 24-26, 2015**, at DOE Headquarters in Germantown, MD. This course is designed for individuals with limited experience in NRC reporting requirements or those who need a refresher. The course content is based on NUREG/BR-0006, Rev. 7 and NUREG/BR-0007, Rev. 6. The following topics, among others, will be included:

- Completion of data forms: transactions, inventory, and material balance;
- Inventory reconciliation;
- Foreign obligations reporting; and
- Report products.

The desired class size is 10 or less. A minimum of 6 is required to conduct the class. You may register for the class by contacting John Ballard at (301) 903-0092, or by email at John.Ballard@nnsa.doe.gov, and providing him with your name, nationality, job title, facility name, address, telephone number, and email address. Due to security requirements for entering the DOE Germantown facility, all potential students who are not U.S. citizens MUST register for this workshop at least 45 days prior to the instruction dates. There are no training fees for this course.

If interested, please contact John Ballard by March 10, 2015.

Upcoming NMMSS II Training Course for DOE

The DOE NMMSS II (MCA-212) training course has been scheduled for **June 9-11, 2015**, at DOE Headquarters in Germantown, MD. It is a follow-up to NMMSS I and addresses topics and report products associated with nuclear materials accounting as they apply to NMMSS. Participants are also encouraged to share NMMSS-related issues and potential problems they may currently be experiencing. The NMMSS I course (MCA-112) is the prerequisite for the NMMSS II workshop.

The desired class size is 12 or less. A minimum of 6 is required to conduct the class. You may register for the class by contacting John Ballard at (301) 903-0092, or by email at John.Ballard@nnsa.doe.gov, and providing him with your name, nationality, job title, facility name, address, telephone number, and email address. Students must also register for the class with the NTC at <https://ntc.doe.gov/default.aspx>. There are no training fees for this course.

If interested, please contact John Ballard by May 30, 2015.

A-M Transaction: When Should I Enter One?

The NMMSS system allows users to enter one-party transactions or adjustments using the action code M. The NRC’s NUREG/BR-0006, Rev. 7, *Instructions for Completing Nuclear Material Transaction Reports*, states that A-M transactions are used for “...reporting a one-party transaction or an adjustment to a one-party transaction (i.e., an onsite gain or loss of material as the result of burnup, production, measured discards, etc.)” This type of transaction typically involves small quantities of nuclear material.

Do not use A-M transactions to document:

- an import of a reportable quantity of nuclear material;
- an export of a reportable quantity of nuclear material;
- a shipment of a reportable quantity of nuclear material to a facility without a valid reporting identification symbol (RIS); or
- a receipt of a reportable quantity of nuclear material from a facility without a valid RIS.

For example, there have been cases where a number of transactions were combined into one A-M transaction, which caused difficulties in tracking specific shipments.

The spurious use of A-M transactions hinders the NMMSS staff’s ability to locate shipments of nuclear materials and, ultimately, complete facility reconciliations. Please contact a NMMSS staff member if you have any questions on A-M transactions.

Imports and Exports: Did You Know?

Licensee transactions involving source material are normally not required to be reported on DOE/NRC Form 741, *Nuclear Material Transaction Report*. However, 10 CFR Part 40.64 requires that NRC licensees **report all imports and exports of 1 kg or more** of uranium and thorium source material on DOE/NRC Form 741. Please be sure to report these. The NMMSS staff uses this information to fulfill the United States Government’s monthly reporting commitments to the International Atomic Energy Agency (IAEA) every month.

Important Information Regarding URENCO USA (RIS YKO)

Effective December 11, 2014, URENCO USA has changed its RIS from YKO to YK1. All shipments involving URENCO USA should henceforth reference the new RIS YK1. The license numbers and other information remain unchanged. Please contact Ms. Carol Wormington at URENCO USA with any questions by telephone at 575-394-6523 or by e-mail at carol.wormington@urencousa.com.

Status of Office of Management and Budget (OMB) Approval of DOE/NRC Forms 740M, 741, 742, and 742C

The NRC has received approval from the Office of Management and Budget to continue collecting NMMSS information from the nuclear industry through the use of DOE/NRC Forms 740M, 741, 742, and 742C. As a result, the NRC has posted on its website these four updated forms. The only change to the updated forms is a new expiration date.

DOE/NRC Form 740M, Concise Note:

The new expiration date for this form is 9/30/2017. Here is the link to the NRC homepage for this form <http://www.nrc.gov/reading-rm/doc-collections/forms/nrc740m.pdf>

DOE/NRC Form 742, Material Balance Report:

The new expiration date for this form is 8/31/2017. Here is the link to the NRC homepage for this form <http://www.nrc.gov/reading-rm/doc-collections/forms/nrc742.pdf>

DOE/NRC Form 742C, Physical Inventory Listing:

The new expiration date for this form is 8/31/2017. Here is the link to the NRC homepage for this form <http://www.nrc.gov/reading-rm/doc-collections/forms/nrc742c.pdf>

DOE/NRC Form 741, Nuclear Material Transaction Report:

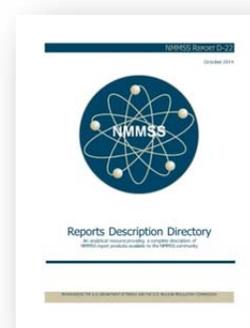
The new expiration date for this form is 10/31/2017. Here is the link to the NRC homepage for this form <http://www.nrc.gov/reading-rm/doc-collections/forms/nrc741.pdf>

If you have any question regarding the information in this article, please contact Brian Horn (NRC) at (301) 287-9129, or by email at Brian.Horn@NRC.gov.

Important Resources Available to the DOE/NNSA-NRC NMMSS Community

The NMMSS staff has updated the D-22, NMMSS Reports Description Directory. This directory provides complete, concise descriptions of NMMSS report products available to the NMMSS community, produced from processed transaction, material balance, and inventory data. It also includes references to background database information. Please contact a member of the NMMSS staff if you wish to receive a copy.

NMMSS Fillable Forms: NMMSS users can download standard NMMSS forms (DOE/NRC Form 741, 742, 742C), enter their data onto the form, and save the data as an XML (Extensible Markup Language) file for transmission to NMMSS, as well as print a hard copy of the form and save the file on their local network or computer. This feature is available on the NMMSS website at:



<http://nnsa.energy.gov/aboutus/ourprograms/nuclearsecurity/nmmsshome/nmmssinfo/fillableforms>

DOE Sites: Important Reminder for All Transfers of Materials to or from the Department of Defense (DoD)

As stated in section 6.1.3.2 of the DOE NMMSS User Guide - Rev. 2.0, dated April 1, 2013, **“Transfers of Material to or from DoD Pursuant to 42 U.S.C. §2121(b),”** the Albuquerque Complex (NA-123.1) must be provided a copy of the completed DOE/NRC Form 741 for transfers of material to or from DoD. Please note that 741 copies can be electronic or hard-copy versions. For assistance or any questions, contact Carol Combs at (505) 845-4743.

NMMSS Website Updates

- Updated DOE/NRC Forms 740M, 741,742, and 742C, both PDF and fillable PDF:

<http://nnsa.energy.gov/aboutus/ourprograms/nuclearsecurity/nmmsshome/nmmssinfo/doenrcforms>

<http://nnsa.energy.gov/aboutus/ourprograms/nuclearsecurity/nmmsshome/nmmssinfo/fillableforms>

- Highlights of NMMSS 2014 Users Training Meeting:

<http://nnsa.energy.gov/aboutus/ourprograms/nuclearsecurity/nmmsshome>

- Schedule of Upcoming Training in 2014 and 2015:

http://nnsa.energy.gov/sites/default/files/nnsa/inlinefiles/Upcoming%20NMMSS%20Training%20November%202014_0.pdf



Transaction/Inventory Due Dates for DOE Sites

Reporting Month	Transaction Due	Inventory Due
December 2014	January 12	January 15
January 2015	February 10	February 16
February 2015	March 10	March 16
March 2015	April 10	April 15
April 2015	May 11	May 15
May 2015	June 10	June 15
June 2015	July 13	July 15

Upcoming FY 2015 Observed Holidays

Christmas Day	Thursday, December 25
Day after Christmas	Friday, December 26
New Year's Day	Thursday, January 1
Martin Luther King, Jr. Day	Monday, January 19
Washington's Birthday	Monday, February 16
Memorial Day	Monday, May 25
Independence Day	Friday, July 3
Labor Day	Monday, September 7

Updated NMMSS Points of Contact For Nuclear Material Reporting Technical Support and Assistance



Name	Topic	Phone	Email Address
Karen Antizzo	Data Submission NMMSS Reports IAEA	(301) 903-0872	Karen.Antizzo@nnsa.doe.gov
John Ballard	DOE/NNSA Reconciliation Training	(301) 903-0092	John.Ballard@nnsa.doe.gov
Elaine Beacom	International Reporting	(301) 903-1328	Elaine.Beacon@nnsa.doe.gov
Carl Berger	Special Requests	(301) 903-3656	Carl.Berger@nnsa.doe.gov
Mitch Hembree	Foreign Obligations	(301) 903-6299	Mitch.Hembree@nnsa.doe.gov
Gary Hirsch	NRC Reconciliation	(301) 903-6870	Gary.Hirsch@nnsa.doe.gov
Mark Huffman	NRC Reconciliation	(301) 903-0236	Mark.Huffman@nnsa.doe.gov
Mary McConnell	NRC Reconciliation	(301) 903-6240	Mary.McConnell@nnsa.doe.gov

Department of Energy
 Peter Dessaulles (301) 903-4525
Pete.Dessaules@nnsa.doe.gov

Nuclear Regulatory Commission
 Brian Horn (301) 287-9129
Brian.Horn@nrc.gov



DOE International POC
 James Crabtree (301) 903-6008
James.Crabtree@nnsa.doe.gov

NRC International POC
 Santiago Aguilar (301) 287-9136
Santiago.Aguilar@nrc.gov

Homepage: <http://nnsa.energy.gov/nmmss>
 Email: NMMSS@nnsa.doe.gov
 Unclassified Fax: (301) 903-1998

Unclassified/Overnight Surface Mailing Addresses

Unclassified

Karen Antizzo

NMMSS Program, NA-73/Germantown Bldg
 U.S. Department of Energy
 1000 Independence Avenue, SW
 Washington, DC 20585-1290

Overnight – Unclassified

Karen Antizzo

Attn: NMMSS Program, NA-73
 U.S. Department of Energy
 19901 Germantown Road
 Germantown, MD 20874-1207

Classified

The NMMSS classified mailing address is available on the Safeguards and Security Information Management System (SSIMS) or by calling a NMMSS analyst. Identify Karen Antizzo as the recipient and NA-73 as the organization.

IMPORTANT: The “DO NOT X-RAY” marking does not prevent incoming packages from being sanitized. Please package compact discs (CDs) in cardboard rather than plastic casings. The plastic is heated by the sanitization machine, thereby warping the CD. There is less chance of this occurring if the CD is packaged in cardboard.

For information on transmitting classified data to NMMSS electronically, contact Jim Crabtree, (301) 903-6008 or James.Crabtree@nnsa.doe.gov.

NMMSS News is sponsored by the Department of Energy (POC: Pete Dessaulles; Pete.Dessaules@nnsa.doe.gov, (301) 903-4525) and the Nuclear Regulatory Commission (POC: Brian Horn; Brian.Horn@nrc.gov, (301) 287-9129). Please provide feedback or suggested topics of interest to Karen Antizzo at Karen.Antizzo@nnsa.doe.gov, (301) 903-0872.