



NMMSS Orientation

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NMMSS

- **Nuclear**
- **Materials**
- **Management and**
- **Safeguards**
- **System**

NMMSS (continued)

- U.S. database to track movements and inventories of nuclear materials
 - Department of Energy owns NMMSS
 - NAC International performs day-to-day operations of NMMSS
 - Nuclear Regulatory Commission participates in NMMSS operation through a contract with Department of Energy

NMMSS (continued)

- Used to satisfy
 - Domestic needs of the Department of Energy
 - Domestic needs of the Nuclear Regulatory Commission
 - International needs of the U.S. Government

How Do Facilities Fit Into NMMSS?

- Data gets fed into NMMSS by facilities
- NMMSS Reports are based on facility information submitted to and processed by NMMSS
- Once data is in NMMSS, it is a part of history

NMMSS History

- A computerized NMMSS started in the early 1960's
- Mainframe computer & punch cards
- Mid 1990's – The NMMSS transitioned to file server relationship using DOS & FoxPro
- NMMSS is Upgrading to Windows & SQL Server

NMMSS – Abbreviations / Terms

- **RIS** (Reporting Identification Symbol)
- **D-2** (List of RISs for DOE sites)
- **D-3** (List of RISs for licensee sites)
- **D-15** (List of RISs for foreign sites)

NMMSS – Abbreviations / Terms (continued)

- NMMSS generated guidance documents
 - **D-23** (Personal Computer Data Input for Department of Energy Contractors)
 - **D-24** (Personal Computer Data Input for Nuclear Regulatory Commission licensees)

NMMSS – Abbreviations / Terms (continued)

- Forms on which electronic submittals to NMMSS are based:
 - **DOE/NRC Form-741** (Nuclear material Transaction Report)
 - **DOE/NRC Form-742** (Material Balance Report)
 - **DOE/NRC Form-742C** (Physical Inventory Listing)
 - **DOE/NRC Form-740M** (Concise Note)

More Abbreviations / Terms

- NRC (Nuclear Regulatory Commission)
- Licensee (Company/individual who has received a license from NRC or State Government to possess and use nuclear material)
- Contractor (DOE site/facility)
- Source material (natural uranium, depleted uranium, thorium)
- Special nuclear material (plutonium, U-233, or uranium enriched in U-233 or U-235)

More Abbreviations / Terms (continued)

- DOE (Department of Energy)
 - NNSA (National Nuclear Security Administration)
 - HS-1.22 (Office of Information Management)
 - RW (Office of Civilian Radioactive Waste Management)
 - EM (Office of Environmental Management)

Data Security

- NMMSS protects data
- Physical gaps between NMMSS database and telephones, faxes, internet, other computers
- Only the NMMSS operator can directly access data from NMMSS database
- We are very protective of your NMMSS data

One System—Two Primary Sets of Rules

- DOE and NRC have slightly different needs and requirements of NMMSS
- NMMSS:
 - tracks 17 materials for DOE
 - Expects DOE sites to report inventories every Sept. 30th
- NMMSS
 - Tracks 8 materials for NRC
 - Understands that licensee inventory reports are staggered throughout the year

NMMSS Tracks

- Depleted uranium
 - Natural uranium
 - Uranium in cascade
 - Pu-238
 - Thorium
 - Americium-241
 - Curium
 - Neptunium-237
 - Tritium
 - Natural uranium
 - U-233
 - Plutonium
 - Pu-242
 - Enriched Lithium
 - Americium-243
 - Californium
 - Deuterium
- NRC required materials are in green
 - DOE requires tracking of all of these materials in addition to those materials required by NRC

NMMSS Aids to Facilities – Free

- Safeguards Management Software (SAMS)
- NMMSS reports (as requested)
- Telephone discussions with NMMSS staff
- NMMSS Users Annual Training Meeting
- NMMSS News
- NMMSS training courses

NMMSS Users and Training Meeting

- The meeting is for your benefit!
- Ask questions
- Share information and thoughts (both in the meeting and in the hallways)
- Respect the views of others
- If you hear something that sounds wrong, seek clarification.
- Changes have occurred because of suggestions made at these annual meetings.