

The Nuclear Materials Management and Safeguards System (NMMSS)



2015 Annual
Users
Training
Meeting

Accuracy

Accountability

Performance



May 11-14, 2015

Las Vegas, NV

Returns of DOE Loan/Lease Material and Other Materials

Jim Crabtree, U.S DOE/NNSA,
Office of Nuclear Materials Integration, NA-532



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NMMSS Role



- NMMSS role is to assist NRC licensees with return of DOE-owned materials
- We put you in contact with right programs and people in DOE
- As part of annual reconciliations of NRC licensees, NMMSS asks licensees if they have DOE-owned materials they'd like to return
- Licensee can contact NMMSS anytime during the year



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Options



- Options.
 - DOE/NSSA takes back the material
 - DOE/NNSA helps you dispose of the material
 - DOE/NNSA helps you find another user for the material.
- Considerations
 - Value of material to DOE
 - Characteristics of material: physical/chemical form, radiation
 - Nature of loan/lease agreement
- Often a one-off process



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Office of Nuclear Materials Integration



- The NMMSS program is in DOE/NNSA's Office of Nuclear Materials Integration (ONMI)
 - Richard Meehan, ONMI Director
 - Dale Dunsworth, ONMI Lead for Disposition
- ONMI responsible for integration of DOE agency-wide management, consolidation, and/or disposition of nuclear materials
- ONMI coordinates with other DOE programs to determine value of nuclear materials to DOE and disposition paths of DOE materials, usually/primarily material at DOE sites



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Work with Other DOE Programs and Facilities



- DOE Facilities
 - Y-12
 - Savannah River Site
 - Idaho National Laboratory (University Fuel Assistance Program)
 - LANL
- DOE Offices
 - NNSA, Off-Site Source Recovery Project (OSRP) managed by Los Alamos
 - Office of Science, Isotope Sales Program
 - Office of Intelligence



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Information Needed about the Material



- Information NMMSS has
 - Material type - plutonium, enriched uranium, depleted uranium
 - Some isotopic information
 - Composition of ending inventory code
 - Material quantities
- Other information typically needed
 - Radiation levels
 - Physical and chemical form
 - Additional isotopic information
 - Contaminants
 - Pedigree



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DOE-Owned Material Recent Examples



- National Institute of Standards and Technology (NIST)
 - Material still on site at NIST, but DOE facilities or programs are lined up to take materials
 - LANL, Y-12, Office of Intelligence
- MIT Reactor - Old research program with INL
 - In process of determining if material would be of use to DOE
 - Also, considering possible disposition paths and resources
 - Contaminants and radiation levels?
- University of Michigan
 - Heavy water returned to Savannah River Site, helped them fill out NMMSS forms, and close out RIS inventory



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Privately-Owned Materials, DOE -Origin



- Sealed Sources – Not DOE-owned
 - North Texas State University
 - Put them in contact with NNSA Off-Site Source Recovery Project, assisted them with forms
 - Murray State University, figured it out on their own.
- Other Materials – Cal Tech



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Summary



- Contact NMMSS if you have DOE-owned material you want to return
- We will work with other DOE offices to determine options for getting material off your site
- Considerations
 - Value of material to DOE
 - Form, contaminants, radiation levels, terms of agreement
- Sealed sources, privately-owned contact
 - NNSA Off-Site Source Recovery Project
 - www.osrp.lanl.gov

