



# **Future of Nuclear Materials Users and Decommissioning and Low Level Waste Business Lines**

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**Executive Director for Operations**

**October 2, 2012**

# Purpose

- **Provide the Commission with a strategic look at the Nuclear Materials Users and Decommissioning and Low Level Waste Business Line**



**Mark A. Satorius, Director**  
**Office of Federal and State Materials**  
**and Environmental Management**  
**Programs**

**Brian J. McDermott, Director**  
**Division of Materials Safety and**  
**State Agreements**

# Agenda

- **Business Line Drivers**
- **Product Line Accomplishments**
- **Outlook and Strategy**
- **Summary**

# Agency's Mission

***License and regulate the Nation's civilian use of byproduct, source, and special nuclear materials to ensure adequate protection of public health and safety, promote the common defense and security, and protect the environment.***

# **Business Line Drivers**

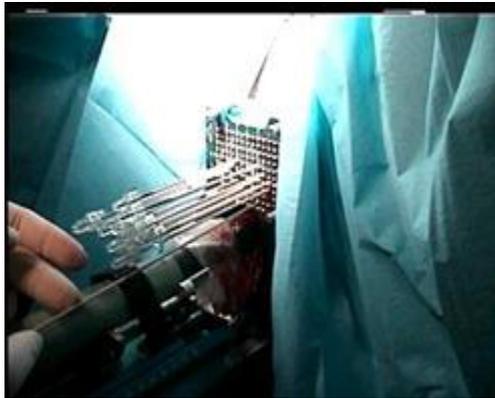
- **Technological**
- **Societal**
- **Economic**
- **International**

# **Product Lines**

- **Rulemaking and Research**
- **State, Tribal, & Federal Programs**
- **International Activities**
- **Licensing**
- **Oversight**
- **Homeland Security**
- **Event Response**

# Rulemaking and Research

Expanded 10 CFR Part 35 Medical Rulemaking



Brachytherapy  
Procedure



Medical Event Reporting  
Workshop in NYC

# Rulemaking and Research

## Radiation Protection Standards

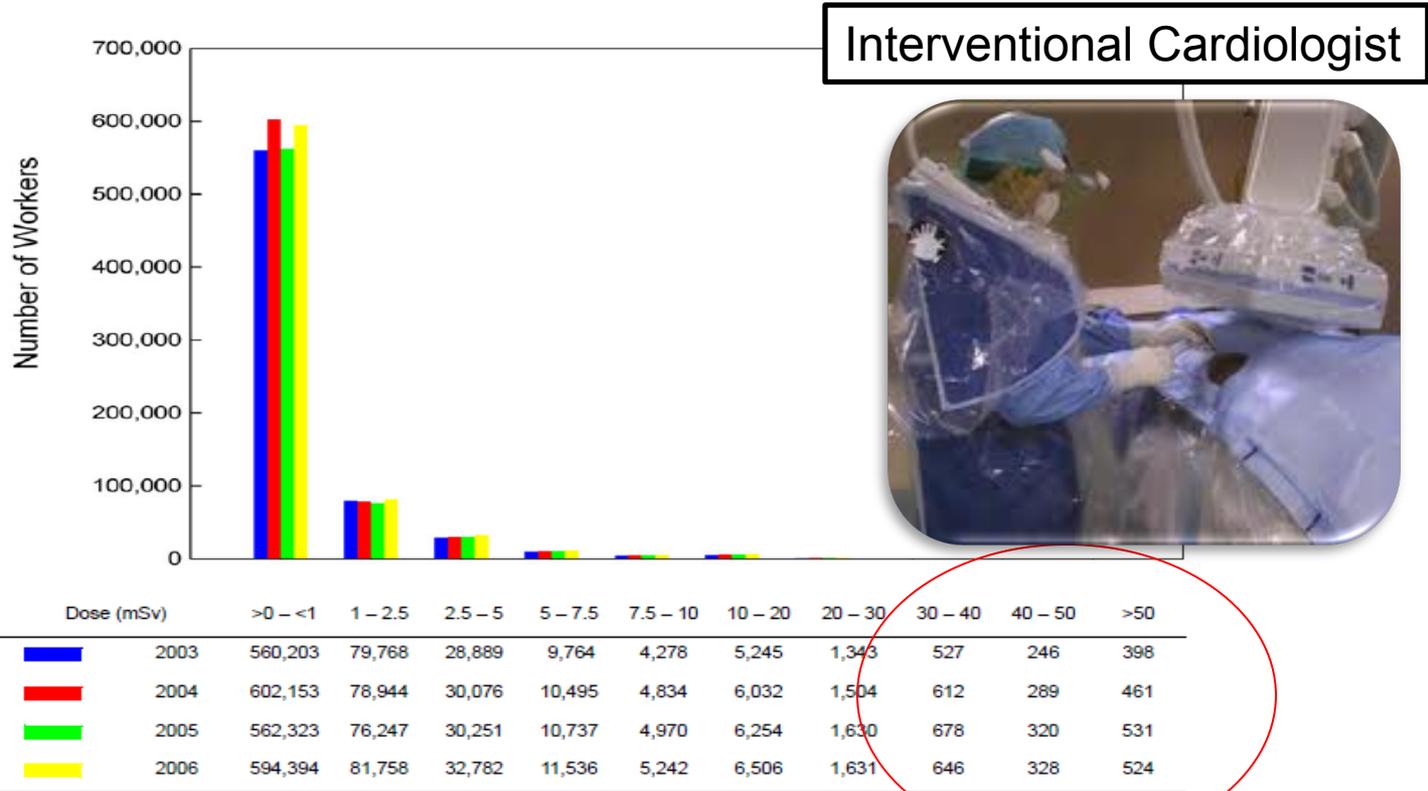


Fig. 7.5. Dose distribution for workers with recordable dose for the medical category, 2003 to 2006.

# State, Tribal and Federal



# International Activities



IAEA Safety Standards

for protecting people and the environment

Radiation Protection and  
Safety of Radiation Sources:  
International Basic  
Safety Standards

INTERIM EDITION

General Safety Requirements Part 3  
No. GSR Part 3 (Interim)



Ghana



Nigeria



Tunisia



Dominican Republic

# Licensing

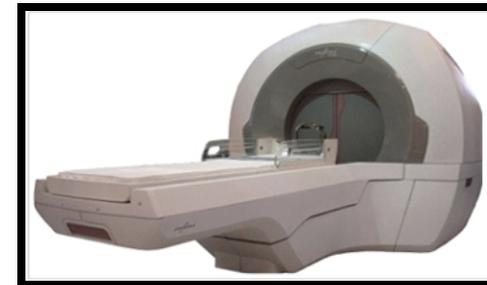
NUREG 1556  
21 Volumes



ViewRay System



MASEP Rotating  
Gamma System



# Oversight

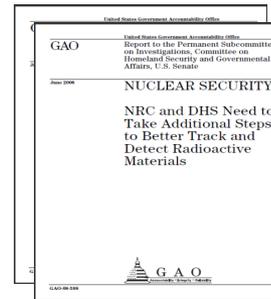


Medical Inspections



Irradiator Inspections

## Self Assessments and Audits

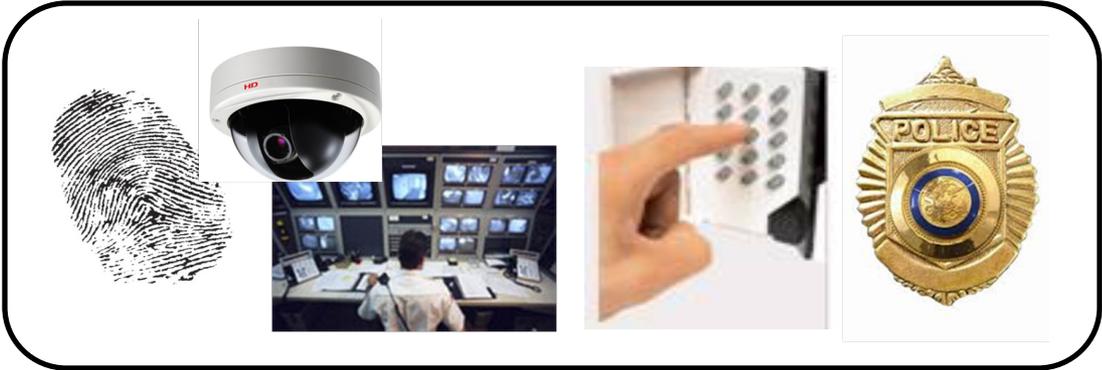


# Homeland Security

## Source Management



## Source Security



# Summary

- **Many Uses, Many Licensees**
- **Interdependent Regulators**



**Mark A. Satorius, Director**  
**Office of Federal and State Materials**  
**and Environmental Management**  
**Programs**

**Larry W. Camper, Director**  
**Division of Waste Management and**  
**Environmental Protection**

# Agenda

- **Business Line Drivers**
- **Product Line Accomplishments**
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- **Summary**

# **Business Line Drivers**

- **Technological**
- **Societal**
- **Economic**
- **International**

# **Product Lines**

- **Licensing**
- **Oversight**
- **Research and Rulemaking**
- **International Activities**

# Licensing

## Decommissioning



Zion Reactor Vessel Head in Shipping Container

Uranium Recovery Decommissioning Site – United Nuclear Corporation Churchrock Mill in New Mexico



# Licensing

## In-Situ Recovery



Cameco Smith Ranch, Wyoming In-Situ Recovery

# Oversight

## Inspections



Inspector conducting gamma surveys at Hydro Resources, Inc. Decommissioning Site in New Mexico

# Oversight

Waste Incidental to Reprocessing



Savannah River  
Site's Saltstone  
Disposal Facility

Savannah River Site's  
F-Area Tank Farm  
Grouting Operations



# Research and Rulemaking

Low-Level Waste 10 CFR Part 61 Rulemaking



Waste Control Specialists Low-Level Waste Disposal Site  
(Agreement State Licensee)

# Research and Rulemaking

## Prompt Remediation Rulemaking



Former NRC  
Commissioner Merrifield  
and Brian Holian take  
radiation readings on the  
Shieldalloy slag pile

# International Activities and Support

IAEA Vienna International Center



Assistance to  
Other Countries



# Summary

- **Produces Diverse Products**
- **Faces Strategic Challenges**
- **Awareness and Long-Term Planning In Place**