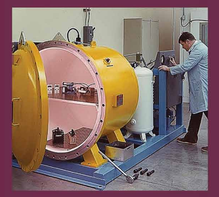
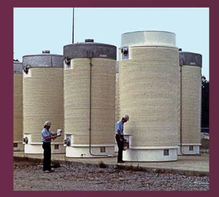
U.S.NRC
United States Nuclear Regulatory Commission
Protecting People and the Environment

RIC 2013

March 12–14

Federal and State Materials and Environmental Management Programs

Management and Protection of Byproduct Material

NRC 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.

Background

- Security of radioactive materials is a top priority for the NRC
- The NRC continues to assess, integrate, and improve security programs to make these materials more secure
- The NRC's leadership role in this area has:
  - resulted in enhanced security of radioactive materials
  - reduced the potential threat from a radiological dispersal device or radiological exposure device

Source Security Accomplishments

Security Measures

- Identification of sources that warrant greatest control based on consequences
- Implementation of International Atomic Energy Agency (IAEA) Code of Conduct
- Enhanced tracking of radioactive sources
- Enhanced focus during inspections and licensing reviews
- Enhanced actions during events of high public interest
- Enhanced stakeholder coordination

Specific Actions to Enhance Control

- Threat assessments conducted
- Security vulnerability assessments
  - irradiators
  - manufacturing and distribution
  - medical facilities
  - universities
  - radiographers and well loggers
- Post 9/11 Security Orders issued

Increased Attention on Cesium Chloride

- Development of strategy for security and use of cesium chloride sources
- Coordination with stakeholders on alternatives to cesium chloride
- Voluntary program to harden existing irradiators to further increase delay
- Harden new irradiators at point of manufacture

Byproduct Material Physical Protection

10 CFR Part 37, "Physical Protection of Byproduct Material," requires the following:

- Enhanced physical barriers and intrusion detection systems, including guards and alarms, to monitor and immediately detect, assess, and respond to unauthorized access
- Background checks, including fingerprinting, employment history, education and personal reference checks, to limit access to approved individuals
- Enhanced shipment monitoring and coordination to ensure security during transit
- Coordination with local law enforcement to respond to an actual or attempted theft, sabotage, or diversion of radioactive materials
- Prompt notification of incidents to the appropriate Government agency

Radioactive Source Management Accomplishments

ISMP
Integrated Source Management Portfolio

National Source Tracking System (NSTS)

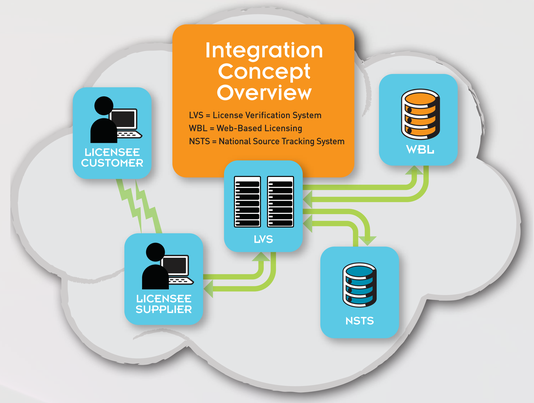
- Tracks transactions and ensures accountability of Category 1 and 2 radioactive sources in the U.S.
- Tracks source information for approximately 1,400 licensees with more than 75,000 sources

Web-Based Licensing (WBL)

- Provides Web-based license application system for NRC licensees
- Provides an up-to-date repository of all licenses nationwide
- Provides an avenue for Agreement States to use the same licensing and information platform as the NRC

License Verification System (LVS)

- Enables verification that Category 1 and 2 possession limits are not exceeded
- Enables validation and authentication of materials licenses.



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