Lost or Orphaned Sealed Source Management — LANL Capabilities and Training Applications



Description/Capabilities

Instruction can be tailored to managers, as well as scientists, technicians, and first responders, who may be required to identify and manage radioactive sources.

Topics that can be covered by LANL subject matter experts include:

- Identification of different types of radioactive sources, their activities, and isotopes
- General introduction to and best practices for transport of radioactive materials meeting or exceeding that of USDOT 49CFR, USNRC 10CFR Part 61, and IAEA SSR-6
- Identification of appropriate and compliant packages (Type A and Type B)
- Identification/interpretation of package labeling (may vary locally)
- Introduction to the basics of transportation, and transportation security
- Identification of potential outlets for management and disposal of orphaned/recovered radioactive sources

Instruction is delivered in the form of classroom lectures, discussions, group exercises, case studies, and demonstrations. Hands-on demonstration and examples of devices, sources, and containers are available.



US and International Laws and Standards

Discussion on US and international laws and standards for safety and secure transport of radioactive materials



Type A



Type AF



Type B

Shipping Containers

Several categories of shipping containers may be used with different requirements depending on isotope and activity



Appropriate/Compliant labeling dependent on activity, Type/Form of material, and container dose rate

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Source Identification

- Visual identification of radioactive sealed sources and devices
- Introduction to common radioactive sealed sources and their use
- Isotopes and chemical form and relationship to dose and contamination



Medical and Industrial Sealed Sources







Appropriate Packaging

- Familiarization with USDOT and NRC regulations
- Identification of compliant shipping configurations
- Familiarization and interpretation with labeling requirements

Basic Transportation Requirement

- Familiarization with USDOT and NRC regulations
- Appropriate modes of transport
- Transportation vehicle markings and labeling
- Driver requirements







Source Collection and Threat Reduction Program **SCATR**



Disposal Options

- Current outlets for federal and commercial disposal
- Basic requirements for disposal depending on facility