

# SOURCE COLLECTION AND THREAT REDUCTION PROGRAM SCATR:

A BRIEF INTRODUCTION AND CURRENT STATUS

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National Academy of Sciences
September 9, 2020



# About the Conference of Radiation Control Program Directors

- We are a 501(c)(3), non-profit professional organization, formed in 1968
- Our membership consists of the state, county, city and territorial agencies across the US that regulate radiation within their jurisdictions, as well as other individuals who have interest in radiation protection and control issues.
- CRCPD's mission is "to promote consistency in addressing and resolving radiation protection issues, to encourage high standards of quality in radiation protection programs, and to provide leadership in radiation safety and education."



# **Purpose**

- To provide a common forum for the exchange of information among state and local radiation control programs.
- To provide a mechanism for states to communicate with the federal government on radiation protection issues.



# **Federal Agency Relationships**

CRCPD, through cooperative agreements, purchase orders and various partnership programs, works very closely with the following federal agencies:

- Centers for Disease Control and Prevention
- Department of Energy/National Nuclear Security Adm.
- US Environmental Protection Agency
- US Food and Drug Administration
- Department of Homeland Security/FEMA
- US Nuclear Regulatory Commission
- US Department of Transportation



# **Other Partnerships and Relationships**

- CRCPD has established relationships with several organizations related to the ongoing work of CRCPD, including:
  - American Association of Physicists in Medicine
  - American College of Radiology
  - American Society for Radiation Oncology
  - American Society of Radiologic Technologists
  - Health Physics Society
  - Institute of Scrap Recycling Industries
  - National Council on Radiation Protection



# **International Relationships**

- → Practical Arrangement with the International Atomic Energy Agency
- → Formal Liaison Organization with the International Council on Radiation Protection



# Source Collection and Threat Reduction (SCATR) Program Origins

- → DOE/NNSA and CRCPD entered a cooperative agreement to support sealed source consolidation and commercial disposal at the state level.
- → NNSA funding, a good deal of which are used for assistance to licensees for disposal.
- + CRCPD administers.

**Goal:** to collect and commercially dispose of sealed sources no longer in use, which could individually or in aggregate be used maliciously.



#### **Chain of Command**

**NNSA** established in 2000 by Congress as separate agency within DOE for management & security of nation's nuclear weapons, nuclear proliferation & naval reactor progress.

- → Defense Nuclear Non-Proliferation- 2015 reorganized
- → Global Material Security- 2015 reorganized
- → Office of Radiological Security- 2015 reorganized
  - + OSRP- 2003 formed
  - + SCATR- 2007 formed
  - → Radiological Removal Program-2015 reorganized



### **Program Scope**

#### Sources eligible for disposal via SCATR:

- → Cs-137 and Ra-226 Brachytherapy sources
- → Sr-90 Eye applicators
- → Low activity sources that exceed the NRC 120-day half-life limit for decay-in-storage.
- ★ Long half-life industrial sources, and calibration sources
- → Gauges
- → Radiography sources
- ★ Leaking sealed sources, formerly categorized as sealed sources
- → Liquid sources in ampoules or sealed glass tubes, less than a few 10's of milliliters



### **Program Scope**

#### Sources not eligible:

- → Scaled Pipe
- Loose radioactive material
- → License-exempt sources
- → Liquid sources in ampoules or sealed vials greater than a few milliliters
- → Any source not meeting the NRC's basic definition of a sealed source
- → Other sources that have already passed through ten half-lives should not necessarily be registered for SCATR since in most cases they may be disposed by other means.



#### Important Dates in Progress of SCATR Program Development

- Commencement of Pilot Project in Florida, 2007-08
  - Very Successful, ~2500 sources disposed
  - Important lessons learned
    - State financial services too cumbersome. Contracting to be done by CRCPD
    - Need to let LLRW brokers collect and package sealed sources.
- Closure of Barnwell to Out-of-Compact LLRW, July 2008
  - 36 states, Guam and Puerto Rico without any Pathway for disposal of LLRW for four+ years.
- Opening of Waste Control Specialists LLRW Facility, May 2012
  - Pathway for disposal of LLRW open again to all states and territories.



# Important Dates in Progress of SCATR Program Development (cont.)

- Revision of NRC's Branch Technical Position on Concentration Averaging and Encapsulation, May 2015.
  - Low Level Radioactive Waste sites able to accept higher activity packages for disposal up to the Class C limits with acceptable justification.

# Unpackaging Shielded 549 Ci, Cs-137 Source at Disposed US Ecology Site

**September 27, 2017** 











# **Collected and Disposed to Date**

30,098 Sources 1360.75 Ci

and an Additional 34,113 Industrial Radiography Sources



### MORE INFORMATION ABOUT SCATR

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WHERE TO FIND THE REGISTRATION FORM

http://osrp.lanl.gov/SCATRTemplete.xls

INFORMATION ABOUT SCATR and Other CRCPD PROGRAMS http://www.crcpd.org