

Removing Disused Radioactive Sources

Eliminating Potential Risk Today

Disused radioactive sources can pose an unnecessary risk to businesses, communities, and the country as a whole. These disused sources have the potential to become lost or stolen, which increases the risk of malicious use in a radiological dispersal device (RDD) or “dirty bomb,” and other acts of terrorism. The Office of Radiological Security (ORS) works to ensure the recovery and disposition of radioactive sources, to help enhance the security of our nation and its people.

Off-Site Source Recovery Project (OSRP) and Source Collection and Threat Reduction (SCATR)

ORS helps connect our nation’s businesses and governments with the services of OSRP and SCATR, which focus on the proper removal of disused radioactive sources, helping to eliminate excess, unwanted, abandoned, or orphaned radioactive sealed sources that pose a threat to national security, public health, and safety. OSRP and SCATR collectively recover approximately 2,500 sources annually from domestic locations for final disposition. The following isotopes comprise the typical sealed sources recovered by either program:

cesium-137	curium-244
cobalt-60	californium-253
strontium-90	plutonium-238
americium-241	plutonium-239

OSRP recovers high-activity disused and unwanted radioactive sealed sources in the interest of national security. Since 1997, OSRP has removed more than 35,000 radioactive sealed sources containing more than one million curies of material from over 1,200 industrial, educational, healthcare, and government facilities.

SCATR, managed by the Conference of Radiation Control Program Directors (CRCPD), provides cost-shared support for the packaging, transport, and disposal of Class A, B, and C sources with access to a commercial disposal facility. Over 18,000 radioactive sources have been recovered from commercial facilities through this program.

ORS offers its participants a wide range of support, including assistance with sealed source identification, packaging, transportation, secure storage, and disposition.

Development of the 435-B Transportation Container

The ORS Container Development Project works to ensure that adequate Type B containers are available to transport Category 1 and 2 sources. The 435-B Transportation Container is a new general use Type B container that meets transportation regulations and is suitable for the recovery of high-activity beta/gamma devices. The unshielded leak-tight container is certified by the Nuclear



Regulatory Commission and Department of Transportation to transport several self-shielded irradiators. ORS is currently working to make this design more widely available. A new larger shielded container, the 380-B, is currently under NRC review.

Registering for Removal Services

Licensees who are in possession of radioactive sealed

sources should register them at <http://osrp.lanl.gov> and follow the online registration instructions. For more information on the source registration process, call 877-676-1749 or email osrp@lanl.gov.

International ORS Removal

Internationally, ORS partners with countries and organizations on the proper removal of high-risk disused radioactive sources. Through ORS collaborative efforts, radioactive sealed sources are stored in several national repositories, or, in some cases, repatriated to their country of origin.

Additionally, the ORS Search and Secure project supports partner countries with equipment and training needed to search for orphaned or abandoned sources.

For more information, contact: ORSInfo@nnsa.doe.gov.



ORS

Office of Radiological Security

Protect • Remove • Reduce

Global
Material
Security



NNSA
National Nuclear Security Administration

