

Cesium Irradiator Replacement Project (CIRP) Incentives

- No cost, priority, and secure removal and disposal of disused sources, valued at **\$500k** per device.
- Reimbursement of **50% of the cost** of the replacement X-ray device upon commissioning.



Cesium Irradiator Replacement Project
Achieve Permanent Risk Reduction with the Help of ORS

Incentives for Permanent Risk Reduction
While radioactive sources, such as cesium-137 and cobalt-60, play an important role in commercial, medical, and research facilities, they also require compliance with regulatory requirements and sufficient security to ensure these sources from falling into the wrong hands. Thanks to the maturation of technology, visible X-ray and non-radiographic-based irradiators are now available and are in use at many facilities across the country.

The Cesium Irradiator Replacement Project (CIRP), offered by the Department of Energy/National Nuclear Security Administration's (DOE/NNSA) Office of Radiological Security (ORS), provides incentives to facilities interested in replacing cesium-137 and cobalt-60 based irradiators with non-radiographic X-ray devices. These incentives include the safe removal and disposal of disused irradiators and payment of up to 50% towards the purchase price of new devices.

CIRP was launched in 2014 and supports the "safest source" goal to eliminate blood irradiation devices that rely on cesium chloride by December 31, 2027. With the assistance of ORS and CIRP, more facilities located in major U.S. cities have already removed and replaced their cesium irradiators achieving permanent risk reduction both in their facilities and throughout their communities.

Benefits of New X-Ray Irradiators
Replacement technologies offered through CIRP perform as well as, or better than, existing cesium irradiators. These new X-ray devices are already in use in many facilities across the country. In addition to proven performance, replacing your cesium-137 and cobalt-60 device with X-ray can also offer the benefits of:

- Mitigation of security risks, hassles, and associated special security costs
- Elimination of emergency and decommissioning liability risks associated
- Consistent, often automatic, throughput over the lifetime of the device
- No source decay
- Additional and enhanced capabilities with some devices.

"We recently decided to use X-ray instead of cesium irradiators in our new building. Moving these sources to this new facility, right next to hospital and emergency rooms, addressed all of our concerns regarding alternative technologies."
— Joseph J. Jones, PhD
Senior Director Radiation Safety, MD, Baylor

"ORS provided a lot of assistance for us to switch from a cesium irradiator to an X-ray irradiator. They provided the funding, the equipment, and the training. They were being covered by ORS and the cost of the X-ray irradiator was reimbursed a month after the old irradiator was picked up. We'll be back with them in a check."
— Antonio Hernandez, Abasco Medical Center

X-RAY ON
Mount Sinai