

Mobile Plutonium Facility

Remote Recovery and Response

The Remote Recovery and Response (R3) capability is a subset of the Mobile Plutonium Facility (MPF) that can deploy to a location outside of the United States to expeditiously remove nuclear materials of concern (NMOC) having issues with current storage conditions or having been determined to be at risk of proliferation. Plutonium (PU) metals, oxides, or Plutonium/Highly Enriched Uranium mix (PU/HEU) are safely removed from a host country (HC) facility for transport back to the Mobile Plutonium Facility (or as otherwise determined) for final packaging and shipment to a predetermined IAEA safe haven.

The MPF was developed and is maintained through the U.S. Department of Energy's National Nuclear Security Administration Office of Material Management and Minimization Mobile Packing Program.

Capabilities

- ▶ Deployable outside of the continuous U.S. in 3-7 days
- ▶ Deployable with small team of 4-8 subject matter experts (SME)
- ▶ Material container integrity inspection
- ▶ Overpack of HC containers as needed
- ▶ Mobile X-ray for content and inter-container verification
- ▶ Classified/Unclassified Communications Systems
- ▶ Non-Destructive Analysis (NDA) qualitative measurements

MPF R3 Equipment

The MPF R3 includes all the necessary equipment to execute limited material recovery and removal in a single ISU-90 shipping container:

- ▶ Glovebags with HEPA filters, glovebox material removal kits and HEPA vacs
- ▶ Radiological surveying, air-monitoring equipment, dosimetry, PPE and decontamination supplies
- ▶ Communications equipment: radios, satellite phones, laptops and satellite system (classified and unclassified)
- ▶ Portable generators
- ▶ HPGe and Rad Eye for characterization analysis
- ▶ Portable, battery-operated digital radiography (DR)
- ▶ Packaging equipment for temporary storage or shipment
- ▶ SPOT, an autonomous quadruped robot to conduct radiological and industrial hazard surveys and facility mapping

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