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Mobile Plutonium Facility

Early Operations

The Mobile Plutonium Facility (MPF) can deploy a subset of its Plutonium Response Team (PRT) members and equipment to a location outside of the United States to assist Department of Defense or other entities in a mission scenario where it is necessary to assemble large quantities of nuclear materials in a single location with configuration that is safe from a criticality. This assembly of materials would be temporary until characterization and packaging for shipment out of the Host Country (HC) could be performed by the full MPF team or as otherwise directed by the NNSA.

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 Packaging Program.



Capabilities

- Deployment in 7-14 days
- Radiological screening for dose and contamination rates
- Non-destructive assay characterization of the nuclear materials
- Safe spacing and temporary storage to protect from criticality
- Safe temporary overpacking of containers that may be suspect for adequate confinement of nuclear material
- Small equipment footprint, typically seven modules

Equipment

- Lead Module: Criticality safe spacing for temporary container storage
- Receipt Module: Dose and contamination equipment with containers for overpack as required
- X-Ray Module: Houses X-Ray equipment
- Non-Destructive Analysis Module: Calorimetry, neutron and gamma analysis
- Command Module: Command and control center, communications center with satellite (classified and unclassified) network
- Diesel generators and fuel storage modules

Contacts

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