## **Global Threat Reduction Initiative Highlights**

## **Background:**

On February 11, 2004, President Bush stated in a speech at the National Defense University that the greatest risk to the United States or anywhere else in the world is the possibility of a nuclear or radiological materials terrorist attack. The U.S. Department of Energy (DOE) has several ongoing efforts to combat this threat. In the latest step to increase effectiveness in preventing nuclear and radiological materials from falling into the hands of terrorists or other rogue actors, Secretary of Energy Spencer Abraham announced the Global Threat Reduction Initiative (GTRI).

The mission of the GTRI is to remove and/or secure high-risk nuclear and radiological materials and equipment around the world that pose a threat to the United States and to the international community. This initiative will comprehensively address all vulnerable nuclear and radiological materials throughout the world and secure and/or remove these materials and equipment of concern as expeditiously as possible.

To carry out the Initiative, the Secretary has directed the National Nuclear Security Administration (NNSA) to consolidate and accelerate the Department's nuclear materials removal efforts, and complete a comprehensive inventory of research reactors and vulnerable nuclear materials worldwide to rapidly identify and address any gaps in current security coverage and recovery or removal efforts. Under the Initiative, which will include the establishment of a new office under the Deputy Administrator for Defense Nuclear Nonproliferation, the Department will further refine its threat-based, prioritized approach to better address the materials of proliferation concern around the world. The Department of Energy will then work to systematically address each facility that possesses high-risk fissile and other nuclear materials. The Initiative will be carried out in close cooperation with other U.S. Government agencies such as the Department of State, and international organizations such as the International Atomic Energy Agency and other global partners.

## **Program Description:**

NNSA will consolidate, accelerate, and expand under centralized management the Department's current programs related to nuclear materials removal and radioactive source security and recovery:

- Russian Research Reactor Fuel Return (RRRFR) Program
  - o Eliminates stockpiles of Russian-origin HEU by assisting eligible countries to convert their research reactors from HEU to low-enriched uranium (LEU) fuel upon availability and qualification.
- Reduced Enrichment for Research and Test Reactors (RERTR) Program
  - Targets research reactors and medical isotope production processes worldwide for conversion to suitable LEU fuels and targets.
- Foreign Research Reactor Spent Nuclear Fuel (FRRSNF) Acceptance Program

- Eliminates stockpiles of U.S.-origin spent nuclear fuel from foreign research reactors through repatriation to the United States.
- Radiological Threat Reduction (RTR) Program
  - o Identifies, recovers, and stores, on an interim-basis, certain domestic radioactive sealed sources as well as other radiological materials that pose a security risk to the United States and/or world community.
  - o Reduces the international threat posed by radiological materials that could be used in a radiological dispersal device (RDD) or 'dirty bomb.'

This new Initiative also will establish a comprehensive global database to identify and prioritize nuclear materials and equipment of proliferation concern not being addressed by existing threat reduction efforts.

- Global Research Reactor Security Study
  - Conduct a review of research reactors and associated facilities worldwide and develop a preliminary risk assessment of materials and sites relative to vulnerability to sabotage, theft, or terrorist attack.

To better address removal efforts, this Initiative also provides for a newly-formed Global Materials Recovery Team that will pre-position equipment and designate personnel for urgent nuclear materials recovery operations. The Initiative combines radioactive source security and recovery efforts with nuclear materials security and removal efforts to maximize synergies among programs. In many cases, vulnerable nuclear materials and radioactive sources are co-located at civilian research reactors worldwide.