NONPROLIFERATION

NNSA works tirelessly to secure or eliminate nuclear material around the world and build partnerships to prevent proliferation of sensitive technologies or materials.

MATERIAL MANAGEMENT AND MINIMIZATION

NNSA reduces the risk of highly enriched uranium and plutonium falling into the hands of non-state actors by minimizing the use of and, when possible, eliminating weapons-usable nuclear material around the world. NNSA also supports U.S. leadership in civil nuclear industry and the nonproliferation regime by ensuring our industry and allies have access to non-weapons-usable nuclear materials for scientific applications (including High-Assay Low Enriched Uranium or “HALEU”).

GLOBAL MATERIAL SECURITY

NNSA works with over 100 partners worldwide to secure nuclear and radioactive material and to detect and deter trafficking of this material. This mission includes: international nuclear security; radiological security; and nuclear smuggling, detection, and deterrence.

NONPROLIFERATION AND ARMS CONTROL

NNSA strengthens the nonproliferation and arms control regimes by building the capacity of international partners to prevent proliferation, ensure peaceful nuclear uses, and enable verifiable nuclear reductions. This mission includes international nuclear safeguards, export controls, nuclear verification, and nonproliferation policy.

RESEARCH AND DEVELOPMENT

NNSA drives innovative research that develops technologies and expertise to detect foreign nuclear proliferation activities and produces operational proliferation detection capabilities, leveraging technical expertise at the national laboratories, plants, and sites, as well as at universities and within private industry.

The medical isotope molybdenum-99 (Mo-99) being purified from a low-enriched uranium solution

Radiation portal monitors conduct 24-hour screening at points-of-entry

Dark blue indicates peaceful nuclear cooperation with the United States through a 123 Agreement

Source Physics Experiments advance U.S. ability to detect underground nuclear explosions

NNSA is a semi-autonomous agency within the U.S. Department of Energy responsible for enhancing national security through the military application of nuclear science.