



## **Department of Defense**

### **Fact Sheet: Semipalatinsk Test Site (STS)**

Posted: March 2012

#### **History of Trilateral Threat Reduction Cooperation at the Former Semipalatinsk Test Site**

From 1949 through 1989, the Soviet Union conducted hundreds of underground nuclear tests and experiments at the former Semipalatinsk Test Site (STS). Located in remote eastern Kazakhstan, the STS occupies approximately 18,000 square kilometers, almost the size of New Jersey and over five times the size of the Nevada Test Site. After achieving independence, Kazakhstan partnered with the Department of Defense (DoD) Nunn-Lugar Cooperative Threat Reduction (CTR) Program – with support from Department of Energy’s Los Alamos National Laboratory (LANL) – to eliminate legacy Soviet nuclear test infrastructure in support of nonproliferation objectives. In 2000, DoD completed its project to seal 181 test tunnels and 13 test shafts at STS.

In the following years, evidence of scavenging activity at STS, coupled with the increased focus on nuclear terrorism after September 11, led to an assessment that nuclear material remaining in the tunnels was vulnerable. An unprecedented collaboration between former Soviet and U.S. weapons scientists concluded that several hundred kilograms of nuclear material likely remained at the site. Russia, Kazakhstan, and the United States concluded the material was vulnerable enough to require a sustained effort to secure areas of STS. Scientists and policymakers identified over 40 tunnels that posed sufficient risk to be included in the work plan. DoD’s CTR Program managed the project for the United States, with technical support from LANL.

Work crews entombed the material in special cement, plugged and collapsed the tunnels, and resealed and concealed the tunnel portals. The special cement rendered the nuclear material inaccessible except through a large-scale, easily-observable mining and recovery effort. President Nazarbayev declared part of STS an “exclusion zone” and the U.S. partnered with Kazakhstani security forces to provide equipment and training to deter and detect intruders.

President Obama’s April 2009 announcement of a four-year nuclear international effort to secure all nuclear material led to an acceleration of the STS project and completion almost two years ahead of the original schedule. The project, initiated in 2005, will be completed within budget, at an estimated total cost of \$150 M over eight years. This trilateral effort was by far the most extensive nuclear security project at STS, although between 2002 and 2005, DoD’s CTR Program also secured nuclear material through three smaller-scale projects in other areas of STS.