Trucks pass through detection systems at RNCTEC at the NNSS.

Introduction

The Radiological/Nuclear Countermeasures Test and Evaluation Complex (RNCTEC) is a multi-use test and evaluation platform that serves the U.S. homeland security mission.

Senior Scientists check data during a recent test.

NEVADA NATIONAL NNSS SECURITY SITE

Global Security

Radiological/Nuclear Countermeasures Test and Evaluation Complex (RNCTEC)

The Nevada National Security Site (NNSS) is the home of the Radiological/Nuclear Countermeasures Test and Evaluation Complex (RNCTEC), which is the newest NNSS testing venue in 4 decades. RNCTEC was designed for nuclear detection test and evaluation (T&E) with a unique capability to use special nuclear materials during testing. This complex provides the nation with the necessary facilities and capabilities to validate the performance of systems used to protect the United States from the threat of a terrorist radiological or nuclear attack, whether under development or already deployed. RNCTEC provides an environment tailored to customer requirements. The sponsor is the U.S. Department of Homeland Security, Domestic Nuclear Detection Office.

Capabilities and expertise include:

- Wireless and hardwired Data Collection System that is defensible and test specific
- Dedicated data collection server isolated from the internet.
- Over 20 isotopes (120 sources), special nuclear materials, and medical sources on demand
- Inventory of shielded containers (poly, lead, steel, graphite, etc.)
- Over forty 20’ Conveyances, some specially configured

The complex will test and evaluate sensors that will be deployed to U.S. border crossings, such as this one.

Advanced Spectroscopic Portals

- Commerce simulating loads, including Natural Occurring Radioactive Materials and Naturally Attenuating Materials
- Computerized test-observation reports
- Bar-coding capability for configuration control
- Accelerator pit concrete lined (12’ x 30’ x 17’ deep)
- Dedicated control room with cameras that provide a 360 degree view of test bed
- Dedicated core team to support all aspects of testing

Sensors are configured on the test pad.

National Nuclear Security Administration

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