Introduction

In support of the U.S. Department of Homeland Security Presidential Policy Directives and National Planning Scenarios, the U.S. Department of Energy National Nuclear Security Administration’s Nevada Field Office (NNSA/NFO) provides a unique radiological/nuclear weapons of mass destruction (WMD) training center located at the Nevada National Security Site (NNSS). Emergency response personnel come from around the country to be trained to take immediate, decisive action in response to terrorist use of radiological or nuclear WMDs, such as improvised nuclear devices, radiological dispersal devices (RDDs) and radiation exposure devices.

Global Security

T-1 Radiological/Nuclear WMD Incident Exercise Site

History

As part of Operation Cue, the Federal Civil Defense Administration constructed a “typical American community” at the NNSS to assess the effects of a 29-kiloton nuclear detonation. The Apple II nuclear weapons test was conducted during a nationally televised event on May 5, 1955.

In response to the September 11, 2001 terrorist attacks, the NNSA/NFO’s Counterterrorism Operations Support (CTOS) training program decided to reuse the Apple II test site’s ground zero as the premier training center for America’s military and first responders where they learn the skills required to respond to radiological/nuclear incidents.

Radiological/Nuclear WMD Incident Exercise Site (T-1 Site)

T-1 was established in 2004 and is unlike any other training ground in the United States. It is located in a remote, highly secure area of the NNSS, 65 miles northwest of Las Vegas, and helps ensure the security of the United States by providing nuclear and radiological emergency response capabilities and training programs for military and emergency response personnel. CTOS currently uses T-1 to train more than 2,000 military and first responders annually.

As a result of Apple II, a small amount of radioactive material remaining from the detonation has migrated below the surface of the soil. This creates elevated background radiation levels simulating widespread radiological contamination from a nuclear detonation or multiple RDDs, yet poses minimal risk to participants. This allows T-1 to provide

1. Ground Zero of Actual Nuclear Detonations
2. RDD in Downtown with Buses and Cars
3. RDD at Airport with Planes and Trucks
4. RDD at Train Station with Locomotive
5. Rail Station/Classroom
6. Industrial Site/Clandestine Laboratory
7. Attacks on Tractor Trailer Transport Vehicles
8. Airliner Debris Field
9. Participant Staging Area
10. Contaminated Restaurant and Strip Mall
11. Residences/Safe Houses
12. Railroad Tunnel
13. Crashed/Damaged Vehicles
a unique, realistic, and safe training area today. Adding to the realism, CTOS has created multiple training venues to include a derailed train, a simulated 737 plane crash, a small town and multiple vehicle accidents.

In addition to the elevated background radiation, CTOS incorporates additional industrial sealed radioactive sources placed in exercise areas to create higher levels of radiation as needed for training objectives. The T-1 site has more than 47 acres of exercise venues, allowing more than 100 emergency responders to participate simultaneously.