Radiological Operations Support Specialist (ROSS)

Radiological Operations Support Specialists (ROSS) provide technical expertise to state, local, tribal, and territorial (SLTT) jurisdictions as radiological and emergency response experts.

A ROSS is a radiological/nuclear incident subject matter expert (SME) that acts as a state and local resource to assist emergency managers and first responders in navigating the unique challenges of radiological incidents and emergencies. By supporting response and planning at the local level, the ROSS program strengthens radiological/nuclear incident preparedness and response at the SLTT and national levels. Qualified through the National Qualification System (NQS), ROSS are trained to integrate into the Incident Command System (ICS) and understand federal tools and software to support state and local responders, emergency managers, and decision-makers. The NQS documents for the ROSS are the 509 and PTB.

ROSS Capabilities

- Gathers, synthesizes, and explains technical radiological/nuclear incident information
- Interprets data products and assists with relevant recommendations
- Provides knowledge of federal assets, such as the Interagency Modeling & Atmospheric Center (IMAAP), CBRNResponder, and the Federal Radiological Monitoring Assessment Center (FRMAC)

Who Can be a ROSS?

Candidates for the ROSS program are individuals with education, training or experience in radiation-related fields, such as health physics, nuclear engineering or radiological science.

Specific requirements are outlined by the FEMA National Qualification System (NQS) 509. The 509 describes ROSS qualifications, including education, training, experience, physical/medical fitness, currency, and professional/technical licenses/certifications requirements.

2014
ROSS Program begins

2016
First ROSS training course held

2018
CTOS begins teaching PER-388

2019
First PTB issued and qualification review conducted

2021
Pilot of the first Virtual Evaluation Scenario Tool (VEST)
Becoming a ROSS

To become a ROSS, candidates must take the ROSS Initial Training Course (PER-388), offered by Counterterrorism Operations Support (CTOS). CTOS offers the ROSS Initial Training Course as a resident course, in Nevada, and as a mobile course when requested. Check the schedule here.

After taking the initial training course, students contact FEMA-ROSS@fema.dhs.gov to receive their official Position Task Book (PTB) and become a Type 4 ROSS. To become a Type 1, 2, or 3, ROSS must complete tasks in their PTB and receive evaluator signatures. Once all relevant tasks are signed off, ROSS work with their Authority Having Jurisdiction (AHJ) to receive official certification. This process is detailed in ROSS policy documents and supported by the ROSS Working Group, ROSS Task Force Leaders, State ROSS Coordinators, and the Conference of Radiation Control Programs Directors (CRCPD). There is a ROSS Webpage with more information on the process for becoming a ROSS.

Bill Irwin serving as the ROSS in a large-scale Department of Energy (DOE) radiological/nuclear incident exercise (Cobalt Magnet 2019).

Becoming a ROSS benefits your community through enhanced ability to integrate into SLTT and regional planning and preparedness activities. It also benefits your career in emergency planning and management.

If you’re interested in becoming a ROSS, working with a ROSS, incorporating ROSS into an exercise or training, or additional information on the ROSS program, please reach out to FEMA-ROSS@fema.dhs.gov.