



RADIOLOGICAL ASSISTANCE PROGRAM

U.S. DEPARTMENT OF ENERGY
 NATIONAL NUCLEAR SECURITY ADMINISTRATION
 OFFICE OF EMERGENCY RESPONSE

RAP is NNSA's first-response resource to detect and identify radiological materials, and advise decision makers on how to safely respond to a radiological incident.



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INTRODUCTION

The Radiological Assistance Program (RAP) is one of the Department of Energy's (DOE) emergency response assets administered by the National Nuclear Security Administration (NNSA). RAP is NNSA's first-response resource for radiological incidents, including transportation and industrial accidents.

The RAP program has nine regional offices throughout the United States. Each region has a minimum of three teams dedicated to respond to radiological incidents within that region. Regional coordination between RAP teams and the states, tribes and local agencies, of their region, is intended to provide a more timely response capability and to foster a working relationship between DOE/NNSA and those organizations. The nine RAP regional offices are:

- Washington, DC; RAP Region 0
- Brookhaven, NY; RAP Region 1
- Oak Ridge, TN; RAP Region 2
- Savannah River, SC; RAP Region 3
- Albuquerque, NM; RAP Region 4
- Argonne, IL; RAP Region 5
- Idaho Falls, ID; RAP Region 6
- Livermore, CA; RAP Region 7
- Richland, WA; RAP Region 8



MISSION

The RAP provides an emergency response capability available to Federal, state, tribal and local first-responder agencies, who address threats from terrorist, non-terrorist or public health and safety incidents involving nuclear or radiological materials. NNSA First Responder personnel can detect, identify and analyze nuclear and radiological materials. The program maintains a 24 hour a day response capability to perform the following specific types of missions:

1. Perform search missions in conjunction with law enforcement to find Radiological Dispersal Devices (RDD), Improvised Nuclear Devices (IND), Radiological Exposure Device (RED), Special Nuclear Material (SNM) or lost sources.
2. Provide Protective Action Recommendations to assist government agencies protect the public and the environment from radioactive material.
3. Conduct outreach to federal, state, local emergency response, law enforcement, radiation safety, and public health organizations to ensure they understand the importance of requesting RAP capabilities and assistance, and to assist these organizations in their efforts to establish or improve radiological response during an emergency.

STEPS IN THE RAP RESPONSE

RAP requests are received in two ways; by the DOE Emergency Operations Center or, directly by the Regional 24-hour hotline. Once directed by DOE Headquarters, the RAP team will deploy. It is important to note, that RAP does not function as a first responder on the scene; however, RAP personnel are likely to be the first DOE asset to arrive and work within an Incident Command Structure to:

- locate and identify radiological materials;
- evaluate data and provide risk assessments;
- provide advice and make recommendations to protect personnel and property and subsequent reentry into a facility;
- translate complex technical data into information that the public can easily understand.

CAPABILITIES

RAP support ranges from technical information and advice via telephone to sending highly trained personnel and state-of-the-art equipment to the incident scene to assist in identifying and minimizing radiological hazards. Each RAP team consists of two to eight members including a DOE team leader, a team captain and health physics personnel.

RAP teams are comprised of personnel specifically trained to perform nuclear/radiological response activities with advanced radiation detection equipment. RAP equipment includes portable field radiation monitoring instrumentation for alpha, beta, gamma, and neutron radiation detection. Equipment for isotope identification, communications, and personal protective equipment is also used to support the response. RAP teams include volunteer members who perform radiological support activities as part of their regular employment within the DOE national laboratory complex. They are trained to provide initial assistance in the mitigation of immediate radiation hazards. As a matter of function, RAP teams are not involved in recovery and cleanup operations.

RAP teams can self-sustain for up to 48 hours. The RAP team leader may function as the senior energy official at the incident and will make arrangements to provide enough personnel should the incident require RAP support beyond 48 hours. The RAP mission is complete when activities identified in the operations plan are completed or the incident commander releases the RAP team.

