



U.S. DEPARTMENT OF ENERGY  
NATIONAL NUCLEAR SECURITY ADMINISTRATION

# RAP

## RADIOLOGICAL ASSISTANCE PROGRAM (RAP)



The Department of Energy's (DOE) National Nuclear Security Administration (NNSA) has the world's leading scientists, engineers and technicians from over 50 years of managing the nation's nuclear weapons program. When the need arises, DOE is prepared to respond immediately to any type of radiological accident or incident anywhere in the world with the following seven radiological emergency response assets.

**AMS** (Aerial Measuring System) detects, measures and tracks radioactive material at an emergency to determine contamination levels. **ARAC** (Atmospheric Release Advisory Capability) develops predictive plots generated by sophisticated computer models. **ARG** (Accident Response Group) is deployed to manage or support the successful resolution of a U.S. nuclear weapons accident anywhere in the world. **FRMAC** (Federal Radiological Monitoring and Assessment Center) coordinates Federal radiological monitoring and assessment activities with those of state and local agencies. **NEST** (Nuclear Emergency Support Team) provides the nation's specialized technical expertise to the Federal response in resolving nuclear/radiological terrorist incidents. **RAP (Radiological Assistance Program)** is usually the first NNSA responder for assessing the emergency situation and deciding what further steps should be taken to minimize the hazards of a radiological emergency. **REAC/TS** (Radiation Emergency Assistance Center/Training Site) provides treatment and medical consultation for injuries resulting from radiation exposure and contamination, as well as serving as a training facility.

### INTRODUCTION

The Radiological Assistance Program (RAP), established in the late 1950's, is one of the emergency response resources, or assets, administered by

NNSA. RAP is NNSA's first-responding resource in assessing the emergency situation and advising decision-makers on what further steps could be taken to evaluate and minimize the hazards of a radiological emergency. Specific areas of expertise include assessment, area monitoring, and air sampling, exposure and contamination control.



RESPOND  
ASSESS  
ADVISE



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### MISSION

The RAP mission is to provide a flexible, around the clock response capability to Federal agencies, state, Tribal, and local governments, and to private businesses or individuals for incidents involving radiological materials. RAP provides around the clock response capability to radiological emergencies.

### CAPABILITIES

RAP is capable of providing assistance in all types of radiological incidents. Requests for assistance may relate to facility or transportation accidents involving radiation or radioactive material. The accident may involve fire, personal injury, contamination, and real or potential hazards to the public. RAP's support ranges from giving technical information or advice over the telephone to sending

highly trained people and state-of-the-art equipment to the accident site to help identify and minimize any radiological hazards.

RAP is implemented on a regional basis and has eight Regional Coordinating Offices (RCOs) in the U.S. The eight RAP regional offices (Regions 1 through 8, respectively) are: Brookhaven, NY; Oak Ridge, TN; Savannah River, SC; Albuquerque, NM; Chicago, IL; Idaho Falls, ID; Oakland, CA; and Richland, WA. RAP teams from one region can integrate into and assist RAP teams from other regions. Each RCO has a minimum of three RAP teams. A full RAP team consists of seven members: a team leader, a team captain, four health physics support personnel, and a public information officer. RAP teams may deploy with two or more members; one member is the DOE team leader.



Survey equipment is used to detect and measure radiation.

## STEPS IN THE RAP EMERGENCY RESPONSE

If an emergency occurs, RAP team members normally arrive at the scene within four to six hours after notification and conduct the initial radiological assessment of the area. A RAP response is tailored based on the scale of the event and additional RAP teams and resources can be deployed as necessary. RAP



team members are trained in the hazards of radiation and radioactive materials to provide initial assistance to minimize immediate radiation risks to people, property, and the environment. RAP may utilize other NNSA assets, such as AMS, ARAC, or REAC/TS in their response. RAP is able to quickly assess the affected area and advise decision-makers on what actions to take and determine if additional resources are necessary to manage the emergency.

## ABOUT THE EQUIPMENT

RAP's highly trained teams have access to the most advanced radiation detection and protection equipment available. The RAP teams' capabilities and resources include portable field radiation monitoring instrumentation (alpha, beta, gamma, and neutron), generators, mobile laboratories, air sampling and decontamination equipment. Communications and personnel protective equipment and supplies are also available to support the response.

respond  
assess  
advise

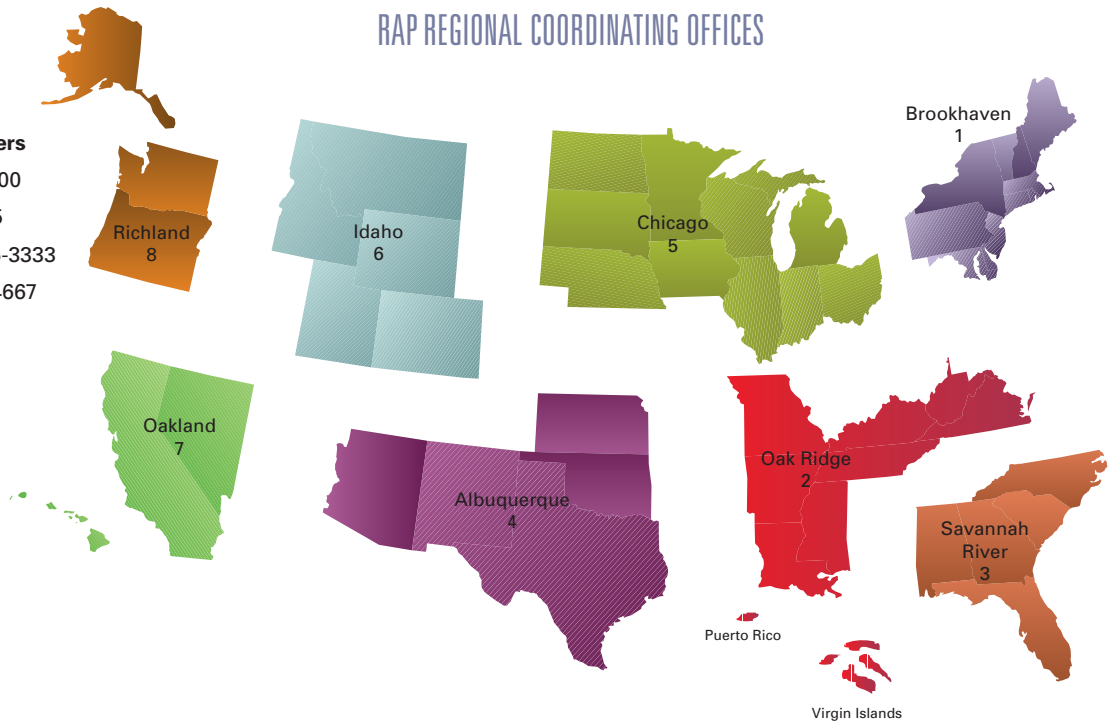


## RAP REGIONAL COORDINATING OFFICES

### Regional Offices — 24 hour numbers

- 1. Brookhaven, NY — (631) 344-2200
- 2. Oak Ridge, TN — (865) 576-1005
- 3. Savannah River, SC — (803) 725-3333
- 4. Albuquerque, NM — (505) 845-4667
- 5. Chicago, IL — (630) 252-4800
- 6. Idaho Falls, ID — (208) 526-1515
- 7. Oakland, CA — (925) 422-8951
- 8. Richland, WA — (509) 373-3800

**Headquarters** — (202) 586-8100



## WHEN THE JOB IS DONE

RAP’s mission is complete when the need for assistance ends or when there are other resources (state, local, Tribal, or commercial services) able to handle the situation. The primary responsibility for an emergency involving radioactive materials remains with the party responsible for the material. Assistance provided by RAP teams does not preempt state, Tribal, or local authority.

## OTHER RAP ACTIVITIES

In addition to providing radiological emergency assistance, RAP can provide emergency response training to state and local first responders, upon request. Since 1996, RAP has been involved in the Weapons of Mass Destruction First Responder Training Program with the objective of preparing the United States for responding to a terrorist attack involving nuclear, biological or chemical weapons of mass destruction. RAP’s unique qualifications make it an integral partner in the success of the Domestic Preparedness Program.