

U.S. Department of Energy

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Pollution responses can involve a large number of organizations due to the potential for widespread and diverse impacts. Government agencies at several levels may have jurisdiction over different aspects of a pollution response. To ensure effective coordination, lead agencies have been designated within the National Response System to coordinate or direct pollution response efforts. While many pollution incidents are small and are cleaned up by the responsible party under the supervision of local authorities, the National Response System ensures that state and federal resources are available to ensure adequate cleanup on larger or more complex spills. Within the National Response System, the U.S. Department of Energy (DOE) has been designated as the supporting agency for oil and hazardous substance pollution incidents occurring within the U.S.

In addition, under the National Oil and Hazardous Substances Pollution Contingency Plan (NCP – 40 CFR Part 300.120(c)), DOE has been identified as the Federal On-Scene Coordinator (FOSC) for releases of hazardous substances, pollutants, or contaminants (but not oil) when the release is on, or the sole source of the release is from any facility or vessel, including vessel bareboat chartered and operated under the jurisdiction, custody or control of DOE. In this instance, DOE shall provide the FOSC / Regional Project Manager (RPM) responsible for taking all response actions.

POINTS OF CONTACT:

Primary		Alternate
24-Hour:	(631) 344-2200 (DOE Hotline)	24-Hour:

FOR THE STATES OF DELAWARE, MARYLAND, AND PENNSYLVANIA

Primary	<u>Alternate</u>
24-Hour:	24-Hour:

FOR THE STATES OF VIRGINIA, WEST VIRGINIA, AND DISTRICT OF COLUMBIA

Primary	<u>Alternate</u>
24-Hour:	24-Hour:

Contact DOE Region II for radiological assistance call (423) 576-1005.

GENERAL

The DOE must identify and resolve environmental policy and radiation protection issues by developing environmental policies, standards, guidance, and associated tools to assist in discharging its environmental and public protection responsibilities.

The DOE's overarching mission is to advance the national, economic, and energy security of the U.S.; to promote scientific and technological innovation in support of that mission; and to ensure the environmental cleanup of the national nuclear weapons complex. The Department's strategic goals to achieve the mission are designed to deliver results along five strategic themes:

- 1. **Energy Security:** Promoting America's energy security through reliable, clean, and affordable energy.
- 2. Nuclear Security: Ensuring America's nuclear security.
- 3. Scientific Discovery and Innovation: Strengthening U.S. scientific discovery, economic competitiveness, and improving quality of life through innovations in science and technology.
- 4. **Environmental Responsibility:** Protecting the environment by providing a responsible resolution to the environmental legacy of nuclear weapons production.
- 5. **Management Excellence:** Enabling the mission through sound management.

Organization/Structure

The DOE is principally a national security agency and all of its missions' flow from this core mission to support national security. For a response in Region III, the DOE has seven major radiological Emergency Response assets that they can tap to bring to an incident upon request:

Accident Response Group (ARG). The ARG is composed of 1. a cadre of weapons designers and engineers, physical scientists, and other technical specialists from DOE's weapon complex, together with specially designed equipment that can collectively or independently be deployed by the Department to provide timely assistance to peacetime accidents and significant incidents involving nuclear weapons throughout the world. ARG deployable capabilities include weapon diagnostics (radiography); robotics; liquid abrasive cutters; anti-contamination clothing and respirators; personnel decontamination stations (showers/hot line operations); ground/soil contamination survey monitors/equipment; air, soil, and water analysis equipment; weapon packaging and containment equipment; and ground transportation for damaged weapons. ARG provides technical advice for determining the radioactive hazards; assists in the collection, identification, and disposition of contaminated materials; and advises on what additional DOE resources may be required.



- 2. Aerial Measuring System (AMS). The AMS is an aerial detection system, based in Las Vegas, Nevada and at Andrews Air Force Base, near Washington, D.C., and is capable of measuring extremely low levels of gamma radiation and locating and tracking airborne radiation. This system also includes aerial photography and multi-spectral scanning capability. AMS capabilities include fixed wing and rotary wing aircraft with radiological measuring equipment (gamma), computer analysis of aerial measurements, and aerial photographic equipment (color and infrared) to locate lost radioactive sources, conduct aerial surveys, or map large areas of contamination.
- 3. Atmospheric Release Advisory Capability (ARAC). ARAC is a computer-based emergency preparedness and response predictive capability operated by the Lawrence Livermore National Laboratory at the National Atmospheric Release Advisory Center in Livermore, California. ARAC provides rapid predictions of the transport, diffusion, and deposition of radionuclides released to the atmosphere and dose projections to people and the environment. ARAC generated dispersion charts/isopleths are valuable tools for planning and implementing protective actions.
- 4. Federal Radiological Monitoring and Assessment Center (FRMAC). The FRMAC provides the organization and structure to coordinate all federal agency radiological monitoring and assessment efforts and activities. The FRMAC is responsible for providing the Lead Federal Agency and the state, tribal, or local authorities involved in a radiological incident with a single source of complied, quality controlled monitoring and assessment data. The Department provides various capabilities from the other assets to support the FRMAC including management and technical personnel, command and control, communications equipment, administrative and logistical personnel, and equipment, etc. In addition, the FRMAC coordinates, integrates, directs, and manages the efforts of the personnel and equipment responding from the other federal agencies in accordance with the FRERP.
- 5. Nuclear Emergency Search Team (NEST). NEST consists of engineers, scientists, and other technical specialists from DOE's national laboratories and the nuclear weapons complex. NEST is prepared to respond within four hours of notification with specially trained teams and specialized equipment to assist the FBI in addressing nuclear/radiological threats. Deployable NEST assets include intelligence, communications, search, assessment, access, diagnostics, disablement, operations, containment/damage limitations, logistics, and health physics capabilities. A large cadre (approximately 200) of trained personnel and specialized radiation detection systems are available to search for ionizing radiation-producing materials.
- 6. Radiation Emergency Assistance Center/Training Site (REAC/TS). REAC/TS is a unique asset that provides medical advice, specialized training, and on-site assistance for the treatment of all types of radiation exposure accidents. REAC/TS is designated as the World Collaboration Center for radiation accident management and is operated by Oak Ridge Associated Universities in Oak Ridge, Tennessee. The REAC/TS center provides a modern multipurpose facility available for handling victims of radiation emergencies who may also have other physical injuries. REAC/TS also provides

medical advice to on-scene medical professionals, either by telephone or through direct consultation from field deployable teams.

7. **Radiological Assistance Program (RAP).** RAP provides advice and radiological assistance to federal, state, tribal, and local governments, and the private sector for incidents involving radioactive materials that pose a threat to the public health and safety or the environment. The initial DOE radiological responders, RAP can provide field deployable teams of Health Physics professionals equipped to conduct radiological monitoring and assessment activities. RAP personnel can also provide radiological advice/consultation, public information, and access to the other DOE Emergency Response Assets. RAP is managed at eight Regional Coordinating Offices across the country

Role/Responsibility

To provide advice and radiological assistance to the Region III Regional Response Team (RRT3) when an event occurs that involves radioactive materials.

- To make DOE resources available to other federal agencies, state, local, and tribal agencies, private organizations, or private persons to assist in resolving incidents involving radioactive materials. Assistance may be in the form of advice or field deployment of specialized assets.
- To coordinate the initial offsite federal radiological monitoring and assessment assistance during the response to a radiological emergency.
- To assume the role of the Lead Federal Agency for radiological emergencies at facilities owned or operated by DOE or involving materials shipped by of for DOE.

The DOE member of the RRT3 provides assistance and resources at the request of the regional RRT to support incident specific responses. Requests for DOE support are made through the appropriate Regional Coordinating Office or the Headquarters Emergency Operations Center (EOC). Although DOE will respond to major radiological emergencies using the National Response Framework (NRF), access to the DOE Emergency Response Assets does not require NRF activation. When responding to radiological emergencies without a Stafford Act Declaration, DOE will use existing funding resources.

Laws/Authorities Governing their Response

- National Oil and Hazardous Substances Pollution Contingency Plan (NCP)
- National Response Framework (NRF)
- Homeland Security Act of 2002
- Robert T. Stafford Disaster Relief and Emergency Assistance Act, as Amended
- Executive Order 12148 Federal Emergency Management
- Executive Order 12656 Assignment of Emergency Preparedness Responsibilities



- Executive Order 13148 Greening the Government Through Leadership in Environmental Management
- HSPD-5 Management of Domestic Incidents
- HSPD-7 Critical Infrastructure
- HSPD-8 National Preparedness
- HSPD-9 Defense of United States Agriculture and Food
- HSPD-10 Biodefense for the 21st Century

Response Requirements

During times of national threat or a Presidential Declaration, the Department of Homeland Security serves as the planning integrator for the President for a more robust federal incident management capability and in order to coordinate all Federal incident Management Activities in support of our State and local partners. All Federal departments and agencies may play significant roles in incident management and response activities, depending on the nature and size of an event. The Federal Emergency Management Agency (FEMA) coordinates response support from across the Federal Government and certain non-governmental organizations (NGOs) by calling up, as needed, one or more of the 15 Emergency Support Functions (ESF).

Each of these functions are coordinated by a single agency (Primary ESF Coordinating Agency) but may rely on other agencies (Support Agencies) to provide resources for each functional area. The mission of the ESFs is to provide the greatest possible access to capabilities of the Federal Government regardless of which agency has those capabilities. Under the National Response Framework (formerly known as the National Response Plan), the DOE and its member agencies and services plays a role (either as the Primary or as a Support agency) for the following ESFs:

	ESF #	Primary Agency	Support Agency
1	Transportation		Х
2	Communications		
3	Public Works & Engineering		x
4	Firefighting		
5	Emergency Management		x
6	Mass Care, Emergency Assistance, Housing, and Human Services		
7	Logistics Management and Resource Support		x
8	Public Health and Medical Services		x
9	Search and Rescue		
10	Oil and Hazardous Materials Response		x
11	Agriculture and Natural Resources		x
12	Energy	X	
13	Public Safety and Security		Х
14	Long-Term Community Recovery		x
15	External Affairs		Х