

Energy Research & Development Administration Radiological Assistance Plan

Division Of Operational Safety - Headquarters

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ERDA RADIOLOGICAL ASSISTANCE PLAN

A. PURPOSE AND SCOPE

1. The purpose of this Plan is to implement the policy and objectives of ERDA Manual Chapter 0601, "Emergency Preparedness Program." Therefore, this Plan sets forth the organization responsibilities, policies, and guidelines for ERDA Headquarters and field office radiological assistance operations including coordination of ERDA and Department of Defense (DOD) capabilities for responding to nuclear weapons and non-nuclear weapons related radiological incidents; and ERDA coordination with nonmilitary Federal agencies, state and local government agencies, private industry, and other nongovernmental organizations.
2. The Plan covers the use of ERDA and other available radiological assistance response capabilities to cope with incidents involving radioactive materials including incidents involving nuclear weapons or peaceful nuclear explosives. Responses are made to incidents occurring in ERDA or ERDA contractor operations, licensed operations, operations of other Federal agencies, operations of state or local government agencies, and in the activities of private users or handlers of radioactive materials.

B. POLICY

The ERDA will make available from its resources radiological advice and assistance, as appropriate, to minimize injury to people, to minimize loss of property, to cope with radiological hazards, and to protect the public health and safety whenever the ERDA believes that such action is necessary or upon request from ERDA contractors, licensees, Federal, state, and local agencies, private organizations, or private persons, in the event of incidents believed to involve source, byproduct, or special nuclear material as defined by the Atomic Energy Act of 1954, as amended, or other ionizing radiation sources where such sources have been used in ERDA-supported work.

C. OBJECTIVES

1. To provide guidelines for the conduct of radiological assistance operations in accordance with ERDA policies, standards, regulations, and ERDA responsibilities and authority assigned by Federal statutes and Executive orders.
2. To develop an ERDA emergency radiological assistance capability prepared to respond immediately for the protection of the health and safety of the public, of persons employed in ERDA work, and of others whose health or safety may be endangered as the result of radiological incidents.

3. To delineate the ERDA organization and administrative and operating procedures necessary to effectively discharge ERDA obligations under formal interagency agreements on response to radiological incidents.
4. To cooperate with and assist other agencies in establishing suitable plans, guidelines, arrangements, or procedures for implementing mutual assistance between them and the ERDA in the event of radiological emergencies, and to bring to bear the combined radiological emergency resources of the ERDA and other appropriate agencies to cope with health and safety hazards resulting from radiological incidents.
5. To encourage state and local governments, private industry, and other organizations to develop their own radiological emergency capabilities and plans for coping with radiological incidents.

D. ACRONYMS AND DEFINITIONS

ERDA - U. S. Energy Research and Development Administration
NRC - Nuclear Regulatory Commission
AL - Albuquerque Operations Office
DOD - U. S. Department of Defense
IRAP - Interagency Radiological Assistance Plan
JNACC - Joint Nuclear Accident Coordinating Center
RCO - ERDA Regional Coordinating Office
RAP - ERDA Radiological Assistance Plan
FIELD ORGANIZATION - A general term referring to (1) ERDA major multi-program offices and Energy Research Centers reporting directly to the Assistant Administrator for Laboratory and Field Coordination; and (2) special purpose ERDA offices reporting to Headquarters organization components other than the Office of the Administrator. For purposes of the Radiological Assistance Program, the Brookhaven Area Office of the Chicago Operations Office is considered to be a field organization.

HEADQUARTERS -

- (1) When used as a physical location, means the ERDA offices located in Washington, D. C., at Germantown, Maryland, and elsewhere in the Washington, D. C. metropolitan area.
- (2) When used as an organization title, means the total group of ERDA divisions, offices, and other components responsible for ERDA-wide functions, including those located physically at Headquarters and representatives and components of these divisions and offices located in the field to perform specific Headquarters functions.

LOCAL GOVERNMENT - Any county, city, village, town, district, or other political subdivision of any state, and the District of Columbia.

RADIOLOGICAL ASSISTANCE - Action taken after a radiological incident to:

1. evaluate the radiological health hazard,
2. minimize personnel exposure to radiation and/or radioactive materials,
3. minimize the spread of radioactive contamination,
4. minimize damaging effects on property,
5. assist in carrying out emergency rescue and first aid procedures necessary to save life and minimize injury,
6. provide to appropriate authorities technical information and medical advice on the treatment of people exposed to radiation and injuries complicated by radioactive contamination,
7. provide information to the public as quickly as possible to minimize undue public alarm and to assist in the orderly conduct of emergency activities, and
8. carry out other general emergency measures.

RADIOLOGICAL INCIDENT - An occurrence which results in the loss of control of radioactive materials and involves a hazard or possible hazard to life, health, or property.

REGIONAL COORDINATING OFFICES - Field organization offices assigned specific geographical regions of the United States (including the Canal Zone, Puerto Rico, and Virgin Islands) in which they are responsible for implementation of the ERDA Radiological Assistance Plan on a regional basis. The Regional Coordinating Offices and their respective regions are described in exhibit 1.

SUPPORTING OFFICES

ERDA Field Organization Offices--

Grand Junction Office
Nevada Operations Office
Pittsburgh Naval Reactors Office
Schenectady Naval Reactors Office

ERDA-DOD Joint Nuclear Accident Coordinating Center, Albuquerque, New Mexico (exhibit 3)

NRC Regional Inspection and Enforcement Offices (exhibit 2)--

IEO Region I, King of Prussia, Pennsylvania
IEO Region II, Atlanta, Georgia
IEO Region III, Glenn Ellyn, Illinois
IEO Region IV, Arlington, Texas
IEO Region V, Walnut Creek, California

E. RESPONSIBILITIES AND FUNCTIONS

1. Headquarters

- a. All Headquarters divisions and offices support the effective implementation and operation of this Plan as is appropriate to their respective ERDA program and operating responsibilities and functions.
- b. The Director, Division of Military Application, provides general direction and coordination of ERDA-DOD technical and administrative liaison and implementation necessary to discharge ERDA responsibilities under the Joint Department of Defense and Atomic Energy Commission Agreement in Response to Accidents Involving Radioactive Material (exhibit 3) and other agreements with DOD (exhibit 4) including the conduct of ERDA Joint Nuclear Accident Coordinating Center (JNACC) operations by the Albuquerque Operations Office (AL).
- c. The Division of Operational Safety develops, coordinates, and administers this Plan including interagency coordination necessary to discharge ERDA responsibilities under interagency agreements, except for ERDA JNACC operations as provided in ERDAM 0601 and (b) above.
- d. The Office of Public Affairs provides guidance for the coordination of the development and implementation of appropriate public information procedures to be followed by ERDA and ERDA contractor radiological assistance personnel with respect to the release of radiological incident information to news media and the public. These procedures give special attention to the release of information on incidents involving nuclear weapons and related components, peaceful nuclear explosives, offsite ERDA operations, radioactive materials in transport, licensed operations, and incidents requiring joint radiological emergency operations to be carried on by the ERDA and other Government agencies or private organizations.
- e. The NRC Office of Inspection and Enforcement (OIE) receives reports of incidents involving licensees either from OIE Regional Offices (exhibit 2), licensees, the ERDA Division of Operational Safety or from others who have knowledge of licensed facilities or radioactive materials involved in an accident. OIE may request radiological assistance

to be sent to the incident scene and provides the responding ERDA Regional Coordinating Office (RCO), and other ERDA offices that may be involved, with information, advice, liaison with the licensee, and such other immediate and postemergency assistance as may be available from OIE offices. In all licensee incidents postemergency assistance to the licensee and its employees and investigation of the incident is directed by OIE with appropriate assistance from ERDA offices and facilities.

- f. The Director of the Emergency Action and Coordination Team (EACT) or the Director of the Division of Military Application, Operational Safety or Space Nuclear Systems, as is appropriate, will activate the Headquarters Major Radiological Incident Response Plan if it becomes necessary to provide:

- (1) rapid coordination of Headquarters actions in connection with radiological incidents.
- (2) coordination with the field organizations concerned in the mobilization of resources and the development and release of all public information issuances on radiological incidents.
- (3) Headquarters coordination and direction to bring to bear total ERDA resources and resources of other Federal agencies to cope with radiological incidents.
- (4) Headquarters liaison with the White House, the Joint Committee on Atomic Energy, and other Federal agencies during periods of radiological emergency.

2. Field

- a. ERDA Regional Coordinating Offices carry out the following functions:

- (1) Respond to requests for radiological assistance with the most appropriate ERDA resources and other assistance capabilities available.
- (2) Implement ERDA interagency regional radiological assistance responsibilities in accordance with Headquarters instructions and the functions assigned to Regional Coordinating Offices in the Interagency Radiological Assistance Plan (IRAP) (exhibit 11).

- (3) Support ERDA commitments to the JNACC for assistance, notification, reporting, information, and advice.
 - (4) Establish lines of communication with other ERDA offices, ERDA contractors, other Federal, state, and local governmental agencies, police and fire departments, health authorities, and private industry for informing them on how to get help in radiological incidents and for coordinating radiological emergency response operations.
 - (5) Provide, to the extent practicable, professional staff assistance, information and advice, including the use of facilities and equipment, to other agencies and organizations to encourage the development of radiological assistance response plans and capabilities.
 - (6) Maintain regional radiological assistance plans, procedures, and response capabilities in a condition of readiness adequate to provide effective, immediate response with such ERDA and ERDA contractor personnel, facilities, equipment, other resources, and information as may be needed to cope with radiological incidents.
 - (7) Coordinate regional radiological assistance plans and procedures with appropriate NRC OIE Regional Offices, Federal, state, and local government agencies, and appropriate private organizations (e.g., licensees, hospitals and nonlicensed users of ionizing radiation sources).
 - (8) Assure that radiological assistance is made available as needed to support the emergency planning commitments and arrangements by licensees for Production and Utilization Facilities licensed under the provisions of NRC licensing regulations in Title 10, Code of Federal Regulations, Part 50, Section 50.34 and Appendix E. "Emergency Plans for Production and Utilization Facilities".
- b. AL in addition to RCO functions outlined in a., above, implements ERDA JNACC functions as directed by the Director, Division of Military Application and specified under the provisions of the Joint Department of Defense and Atomic Energy Commission Agreement in Response to Accidents Involving Radioactive Material (exhibit 3), ERDAM 0527, and the Joint Department of Defense and Atomic Energy Commission Memorandum of Understanding for Response to Accidents Involving Nuclear Weapons in the Custody of the DOD (exhibit 4).

- c. The supporting ERDA field organization offices listed in D., above, do not have responsibility for regional radiological assistance activities. Their role is one of supporting the RCO radiological assistance plans and operations through the organization and maintenance of radiological assistance response capabilities at ERDA facilities under their respective jurisdictions. These capabilities are coordinated under the regional radiological assistance plan for the region in which the facilities and related resources are located. When activated for a radiological assistance mission, these capabilities respond under the direction of the RCO in charge.

3. Contractors

ERDA contractors provide radiological assistance response services in accordance with the terms and provisions of their contracts. These services are available to the ERDA on request and include the dispatch of contractor personnel, equipment and materials, and the use of facilities and technical, medical, or other services to cope with the consequences of a radiological incident.

F. PLANNING

1. Radiological assistance planning and operations are carried out in a manner consistent with the provisions of ERDA management directives. These directives are issued as ERDA Manual Chapters which apply to ERDA personnel and programs. The directives cover a wide range of technical and administrative matters and govern the activities of ERDA divisions and offices. They describe ERDA standards, programs, and other technical and administrative requirements. Headquarters and field organization offices responsible for radiological assistance activities are guided by the pertinent provisions of a number of ERDA Manual Chapters listed in ERDAM 0601-055.
2. ERDAM radiological assistance planning is coordinated with other Federal agencies in accordance with the provisions of the IRAP (exhibit 11) and with state and local government agencies concerned with planning against radiological incidents. Planning is also coordinated with NRC and state licensees and other private industrial or nonindustrial organizations whose activities could be involved in radiological incidents. The scope of such coordinated planning includes: establishing lines of communication; orientation on ERDA radiological assistance plans and procedures; advice and guidance on how to obtain ERDA radiological assistance; information and assistance on the organization and training of radiological assistance team capabilities; consultation and guidance on the development of plans and procedures; arrangements for the integration of other radiological emergency capabilities with the Federal system; and the acquisition of information on plants, sites, operations, and emergency plans of organizations whose activities involve such uses of radioactive materials as to present a reasonable probability that an accidental release of radioactive materials could constitute a hazard to public health and safety.

3. Regional Radiological Assistance Plans (see L) implement this general ERDA Plan. Regional plans particularly provide for:
 - a. specific differences between RCO's in their assigned responsibilities, administrative organizations, contractor activities, available resources, relationships with other Federal agencies, state and local government contacts, the nature and magnitude of the nuclear industry in their assigned geographical regions, and the kinds of radiological incidents to which they might be asked to respond;
 - b. regional activation and coordination of the assistance to be provided by other Federal agencies signatory to the IRAP (see H., below, and exhibit 11) as necessary to protect the public health and safety from the consequences of a radiological incident;
 - c. appropriate use of radiological assistance response capabilities under ERDA national emergency and defense plans and emergency plans for ERDA operations (AECM 0601); and
 - d. response of RCO's to incidents or accidents involving nuclear weapons, peaceful nuclear explosives, or components thereof; and
 - e. response of RCO's to incidents or accidents involving nuclear weapons, weapons components, or radioactive materials in DOD custody or in the physical possession of a Military Service in accordance with the provisions of the Joint Department of Defense and Atomic Energy Commission Agreement in Response to Accidents Involving Radioactive Material (see H., below) and instructions and procedures issued by the Headquarters Divisions of Military Application or Operational Safety, and the ERDA element of JNACC.

G. FUNDING

1. The costs of ERDA radiological assistance activities are included as part of the costs of health and safety operations at ERDA installations. When ERDA contractor assistance is dispatched offsite, the expense of salaries, transportation, subsistence, equipment, materials, services, and other resources used to carry out the mission is treated as an onsite operation. However, if an ERDA contractor incurred unusual costs while performing radiological assistance services for the ERDA that could not be anticipated, the contractor could request a budgetary adjustment.
2. Obligations of funds made to non-Federal organizations by ERDA personnel for emergency services are paid by the ERDA office that authorized the purchase.
3. The maximum amount that might be costed by a single ERDA field organization office for radiological emergency operations is limited by the field manager's authority to obligate ERDA funds. This limit could be

exceeded by an authorization from the Administrator. In this context, costs are synonymous with the commitment of ERDA resources whether or not the resources could be recovered after use.

4. The costs of radiological assistance provided in accordance with ERDA radiological assistance policy are not normally subject to the ERDA pricing policy (ERDAM 1701) or intended to be otherwise recovered from the individual or organization who requests and/or receives radiological assistance. However, when any doubt exists as to the justifiability of providing emergency radiological assistance from ERDA resources and there is no other emergency capability available to cope with the emergency, the civil authority or private party responsible for the radioactive material and/or facility or geographical area involved shall be informed that the ERDA will request reimbursement for expenses incurred in emergency operations related directly to coping with the results of the incident.
5. The IRAP provides that offices and personnel normally available will be used for radiological assistance operations. Each participating Federal agency funds its own implementation of the IRAP and its costs of radiological emergency operations. There is no provision in the IRAP for reimbursement of one agency by another for any costs.
6. The Joint Department of Defense and Atomic Energy Commission Agreement In Response to Accidents Involving Radioactive Material (exhibit 3) contains the following provision for the assisting agency to request reimbursement from the agency assisted:

"The Military Service or Agency providing the necessary assistance will fund such costs initially within existing fund availability. The Military Service or Agency having physical possession of the weapon or radiological material at the time of the accident will be responsible for reimbursing, upon request, the Military Service or Agency providing the necessary assistance for those costs which are in addition to normal operating expenses and which are directly chargeable to, and caused by, the radiological accident."

7. The need to request reimbursement of the ERDA for the costs of radiological assistance dispatched abroad will be considered on a case-by-case basis in the event that the costs are not covered under inter-agency agreements to which the ERDA is a signatory, or under the terms of United States Government international agreements.

H. INTERAGENCY AGREEMENTS

1. The Joint Department of Defense and Atomic Energy Commission Agreement in Response to Accidents Involving Radioactive Material (exhibit 3) establishes the general areas of responsibility and procedures for the prompt, effective and coordinated DOD-ERDA response to accidents involving radioactive material. Under this agreement mutual assistance is available to a Military Service or ERDA installation through the JNACC whose functions are primarily coordination, liaison, and

reporting. JNACC is also the DOD office through which Military Service radiological assistance response operations in support of IRAP regional responses to emergencies are coordinated for the DOD.

2. The Joint Department of Defense and Atomic Energy Commission Memorandum of Understanding for AEC Response to Accidents Involving Nuclear Weapons in the Custody of DOD (exhibit 4) supplements the Joint Department of Defense and Atomic Energy Commission Agreement in Response to Accidents Involving Radioactive Material with specific provisions covering the immediate actions to be taken by the ERDA in the event of an accident involving nuclear weapons in the custody or physical possession of the DOD, and the conduct of ERDA activities at the accident scene. The memorandum of understanding applies to peacetime U.S. nuclear weapons accidents occurring anywhere in the world which have an actual or potential adverse impact on public health and safety and is implemented through appropriate DOD and ERDA prescribed instructions and operating procedures (see ERDAM 0527).
3. The IRAP (exhibit 11) constitutes an agreement between the signatory Federal agencies for coordinating Federal, state, and local resources in the event that multiagency radiological emergency action is needed to protect public (or individual) health and safety after the occurrence of a radiological incident. The IRAP provides for ERDA administration, coordination, and implementation through the ERDA Headquarters and field regional organizations for radiological assistance operations. Although the DOD is signatory to the IRAP, responses to accidents involving nuclear weapons are covered only by the Joint Department of Defense and Atomic Energy Commission Agreement in Response to Accidents Involving Radioactive Material and Joint Department of Defense and Atomic Energy Commission Memorandum of Understanding for AEC Response to Accidents Involving Nuclear Weapons in the Custody of DOD. However, under the IRAP, resources of other Federal agencies in addition to ERDA are available to the DOD for coordinated radiological emergency assistance operations needed to protect public health and safety from radioactive materials dispersed as the result of accidents or incidents involving materials in DOD custody.
4. The implementation of interagency agreements executed in connection with other ERDA programs can draw support, where needed, from the interagency agreements for response to incidents involving radioactive materials and nuclear weapons. An example of such other interagency agreements is an agreement between the ERDA and the National Aeronautics and Space Administration (NASA) concerning "Isotopic Systems for Nuclear Auxiliary Power (SNAP) Devices for NASA Space Vehicles." The ERDA implementation of this agreement includes emergency planning for accidents involving SNAP devices wherein provisions are made to use radiological assistance response capabilities available through the IRAP and the Joint Department of Defense and Atomic Energy Commission Agreement In Response to Accidents Involving Radioactive Material.

5. Coordination and cooperation with non-Federal agencies in radiological assistance response operations is encouraged through both informal contacts and formal channels of communication to assure effective and continued liaison with ERDA Radiological Assistance Plan activities. Through the inclusion of appropriate provisions in ERDA Regional Radiological Assistance Plans, and emergency response procedures, the capabilities of non-Federal agencies are integrated. The non-Federal agencies include appropriate provisions in their plans and procedures for coordination of their radiological emergency operations with the Federal radiological assistance system. Formal agreements between the ERDA and non-Federal agencies are encouraged.

I. OPERATIONAL READINESS

1. General Preparedness

- a. RCO's assure that regional radiological assistance plans and ERDA contractor radiological emergency response procedures are periodically reviewed, tested, and revised to assure that they are currently applicable to meet potential emergencies, incorporate all ERDA requirements, apply the most recently accepted technology and practices, and contain accurate and updated information. These plans and procedures include the appropriate application of special services and arrangements made available for radiological emergency operations use, such as the ERDA Aerial Radiological Measuring System (ARMS), the Federal Aviation Administration arrangement for expediting flight plans of aircraft transporting radiological emergency teams (code name FLYNET), and the very high radio frequencies (VHF) allocated to the ERDA exclusively for nationwide radiological emergency communications (see ERDAM 0270, part VI).
- b. Periodic reviews are made by RCO's of the availability and readiness of ERDA and ERDA contractor personnel, equipment, services, and materials that could be used in radiological emergencies to identify any inadequacies to be corrected and to determine that the fullest practicable scope of available resources has been considered.
- c. Liaison is maintained between Headquarters and RCO's and between RCO's and appropriate Federal, state, and local government agencies, and private organizations (e.g., medical and educational institutions, industrial and commercial firms, rescue squad and ambulance services) to assure that arrangements for cooperation and coordination in radiological emergencies are currently effective.
- d. Information describing ERDA radiological assistance team locations and radiological monitoring capabilities, specialized equipment, transportation, and personnel available from ERDA sites, is submitted to the ERDA element of JNACC as requested by AL.
- e. Advice and information is made available to other organizations and to individuals who might become involved in radiological incidents or are directly interested in acquiring guidance on the

actions they might take in the event of radiological incidents. This is accomplished through the dissemination of ERDA published materials (exhibits 5, 6, and 7), ERDA films, and by other means such as articles in magazines, books, replies to requests for information, presentations at meetings and conferences, and information releases to the news media.

- f. Headquarters maintains a Major Radiological Incident Response Plan which provides for the coordination of Headquarters actions in response to serious radiological emergencies and the activation of ERDA and IRAP radiological emergency resources.

2. Resources

- a. Information on the types, quantities, locations, controlling authorities, availability, and methods of mobilizing ERDA and other resources that could be used in radiological emergencies is available for immediate reference through arrangements and procedures maintained by each RCO and the Headquarters Emergency Resources Identification System (ERIS).
- b. ERDA and ERDA contractor resources, such as personnel, equipment, facilities, material and services (exhibit 8), are available for radiological emergency operations subject to essential operational requirements of normal ERDA health and safety and programmatic activities. A minimum number of these resources is maintained for immediate radiological emergency use. Additional resources are available as needed to cope with the hazards resulting from a particular radiological incident. Radiological assistance services are included under ERDA contracts for the operation of ERDA-owned installations and conduct of ERDA-supported work. When appropriate, direct consultant or service contracts are obtained for radiological assistance services.
- c. Resources under the jurisdiction of other Federal agencies are available as provided for by the IRAP and the Joint Department of Defense and Atomic Energy Commission Agreement In Response to Accidents Involving Radioactive Material.
- e. Resources under the jurisdiction of state and local governments and private organizations are available through appropriate formal and informal arrangements for mutual assistance and coordination of radiological emergency operations.

3. Assistance Teams

- a. Radiological assistance response teams are established at those ERDA installations which are adequately staffed and equipped to conduct offsite radiological emergency operations (exhibit 9). Local procedures at these installations assure that those personnel, equipment, and facilities which can be made available for radiological emergency operations are appropriately prepared and ready for activation and dispatch when needed. Advance preparations include:

- (1) ERDA employees who serve as ERDA representatives with ERDA radiological assistance teams or as team captains are authorized by their field office managers to obligate funds for necessary on-the-scene emergency purchases up to a predetermined maximum dollar amount.
 - (2) Emergency cash travel advances for personal expenses and official travel authorizations good for a calendar year are issued to regional radiological assistance team captains and certain other emergency team members subject to being called upon for immediate response to the scene of a radiological incident.
 - (3) Personnel specifically predesignated for possible dispatch to the scene of radiological incidents outside the continental limits of the United States have valid passports on file at all times and are required to maintain the minimum required immunizations for foreign travel to major regions of the world.
- b. ERDA and contractor personnel with appropriate administrative and technical abilities and experience needed in a radiological emergency are selected in advance to perform radiological assistance team duties in addition to their usual work assignments.
 - c. Personnel assigned radiological assistance team duties are appropriately trained to assure that they are prepared at all times to effectively discharge their radiological assistance duties under emergency conditions. In addition to inplant training programs, these personnel attend formal and informal courses, participate in radiological assistance test exercises and maintain personal cognizance of scientific and technological developments in their areas of expertise.
 - d. ERDA and contractor personnel who are subject to being the first called for ERDA radiological assistance team response missions are issued official ERDA identification cards (exhibit 10). This is in addition to identification cards issued to all employees for the purpose of controlling the access of personnel to ERDA offices, sites and facilities. The radiological assistance team identification card has on it the issuing RCO name and both the name and photograph of the team member. It is authentic only when countersigned by an ERDA field organization management official of the issuing office.

J. RADIOLOGICAL EMERGENCY OPERATIONS

1. Limitations

- a. ERDA policy (B., above) on radiological assistance specifies that radiological assistance from ERDA resources encompasses "such radiological advice and assistance as may be appropriate."

Incidents that qualify for radiological advice and assistance are defined as those "believed to involve source, byproduct, or special nuclear material -- or other ionizing radiation sources -- used in ERDA-supported work." Radium and other naturally occurring radionuclides and particle accelerators are included in "other ionizing radiation sources used in ERDA-supported work."

- b. Radiological assistance under this plan is intended primarily for radiological incidents occurring in the United States, Puerto Rico, the Virgin Islands, and the Panama Canal Zone. However, radiological assistance may be dispatched outside of these geographical areas when the U.S. Government operations covered by interagency agreements to which the ERDA is signatory are involved in radiological incidents, or as the Administrator may direct.
- c. Unless the ERDA or an ERDA contractor is responsible for the activity, ionizing radiation source, or radioactive material involved in an incident, ERDA radiological assistance is limited to advice and emergency action essential for the control of the immediate hazards to health or safety and is terminated as soon as the emergency situation is under control. Therefore, responsibility for post-incident recovery, including further action for protection of individuals and the public health and safety, is assumed by the appropriate responsible Federal, state or local government, or private authority.
- d. ERDA radiological assistance at the incident scene is not provided when it is more appropriate for the organization or individual requesting assistance to obtain commercial radiological protection services. However, if it is believed to be necessary to protect the public health or safety from hazards resulting from the incident and commercial services are not immediately available, the ERDA responds to the extent appropriate until commercial assistance can take over emergency operations for the responsible authority.
- e. The limitations on ERDA radiological assistance in c. and d., above, also apply when the ERDA is assisting another Federal, state, or local agency which is responding to an incident within the scope of its authority. In that case, the extent of ERDA assistance is determined by the degree to which the capabilities of the requesting agency need to be supplemented in order to protect the public health and safety.

2. Administrative Considerations

- a. ERDA radiological assistance activities in general must be conducted in accordance with existing ERDA policies, rules, standards, and guidelines contained in ERDA Manual issuances and such other instructions the Administrator may give.

- b. Radiological emergency assistance operations are conducted in accordance with instructions issued by field organization managers to ERDA and contractor offices under their jurisdiction. These instructions are designed to implement the requirements set forth by the Administrator.
- c. ERDA and contractor personnel perform radiological assistance duties as part of their formal employment. Therefore, while performing radiological assistance functions, they are subject to the same rules, regulations, and conditions as in their day-to-day occupations. In addition, insurance, compensation, liability, and tenure benefits of their employment apply in the event of personal property loss, injury, negligence, or error during a radiological assistance mission.
- d. Radiological assistance operations under the direction of an ERDA representative are conducted for and on behalf of the ERDA. However, the ERDA may request contractor personnel to initiate radiological assistance operations in the absence of an ERDA representative. In this case the contractor personnel are acting for and on behalf of the ERDA provided they are performing services covered under the terms of a contract between their employer and the ERDA.

3. Jurisdiction and Authority

ERDA responsibilities for incidents involving operations or radioactive materials off ERDA sites do not in any way abridge state or local government authority, or the authority of other Federal agencies, or take precedence over legitimate private jurisdiction. Therefore, ERDA radiological assistance personnel obtain the cooperation of appropriate Federal, state, and local government authorities and nongovernmental officials in the carrying out of radiological monitoring, decontamination, material protection and recovery, and other emergency operations involving areas, buildings, materials, or people not under ERDA jurisdiction.

4. Public Information

- a. Facts on radiological accidents and incidents are made available to the public in accordance with the ERDA Public Information Program (ERDAM 3101) policy and basic requirements for the release of information involving material in ERDA or ERDA contractor custody at ERDA installations and offsite locations.
- b. Specific procedures are established by Headquarters and field organization offices for the prompt release to the public, by appropriate officials, of those facts about the incident which concern actual or suspected radiological exposure or other health hazards. Information of a private, personal, business confidential or security classified nature, concerning the people, material, or activities involved in the incident, is released only if it is declassified or otherwise cleared for release by the appropriate responsible authorities.

- c. Public announcements to the news media on radiological incidents do not include any conclusions or speculations as to responsibility for the incident, causes or nature of injuries, or guesses about health and safety hazards to individuals, property, or the environment.
- d. When the accident or incident involves personnel, property, or activities of other agencies, organizations, private industry, or private persons, the release of incident information to the public is made by the appropriate non-ERDA authorities or with their approval.

5. Immediate Response Actions

Requests for radiological assistance and reports of incidents involving radioactive materials receive immediate attention. The following immediate actions are taken:

- a. The validity of the request or report is verified.
- b. All readily available facts are obtained from a person at the incident scene, if possible, and from other sources believed to be reliable.
- c. Advice on immediate emergency actions that should be taken by persons at the scene, or going to the scene, is given pending the arrival of an ERDA or other radiological assistance team.
- d. In the event that an incident report is not accompanied by a request for assistance, the ERDA office receiving the report immediately tries to obtain sufficient information on which to estimate the possibility of radiological hazard to the public. If there appears to be a reasonable possibility of a hazard, the RCO in whose geographical region the incident has occurred dispatches an emergency team to the incident scene.
- e. Appropriate RCO and Headquarters offices, other Federal agencies, and state or local government agency officials are notified of the incident and, if believed needed, their participation in the assistance response is requested.
- f. If there is reason to believe that the public should be informed promptly, a public information release is made through the local news media or other appropriate organizations such as the police or civil defense.
- g. Communication with the local authority or a private citizen at the incident scene, or with a reliable person near the incident scene if no local authority is at the scene, is maintained as continuously as circumstances will permit once contact is established.

6. On-the-Scene Radiological Assistance

The radiological assistance team on-the-scene mission is to give advice on and, if necessary, to perform those radiological emergency operations which appear to be required to save life, to minimize personal injury, to protect the public from exposure to radioactive materials, to control radiological hazards, and to protect property and the environment from radioactive contamination. In order to accomplish these objectives, the radiological assistance team will act within the limits of ERDA authority and jurisdiction to:

- a. define the immediate and potential health and safety problems including areas of negligible to gross radioactive contamination, extent of present and potential personal radiation exposure, nature of the radiological hazard, and the emergency measures that should be taken;
- b. offer emergency radiological assistance to the local responsible authorities at the incident scene if assistance is not requested, but whether the offer is accepted or not, the team assesses the hazard to the public and, if such hazard exists, recommends appropriate action to the authorities in charge at the scene;
- c. remain on the incident scene until it is clear that no further public hazard exists and keep the RCO informed of developments;
- d. recommend and, when necessary, assist in immediate emergency measures to control radiological and other hazards to health and safety;
- e. communicate radiological and other information concerning the protection of health and safety to authorities in charge of emergency operations at the incident scene;
- f. document the radiological incident conditions and the emergency health and safety countermeasures carried out or recommended;
- g. make information available to the public concerning the radiological incident, immediate and continuing health hazards, and assistance operations in accordance with ERDA public information procedures and applicable classification or security limitations;
- h. take appropriate action to prevent unauthorized personnel from access to classified information and provide physical protection for the classified material and/or information when classified material or documents are involved;
- i. terminate radiological assistance operations when the radiological hazards have been brought under control, individuals involved in

the incident have been appropriately monitored for radioactive contamination and radiation exposure and have been released or are under the care of local medical or other emergency services, and any necessary protection of the public health and safety is assured.

7. Postemergency Assistance

- a. If the ERDA is responsible for the radioactive material, facilities, or operations involved in the incident, radiological assistance may be extended into the postemergency period. Assistance could include technical advice, physical help in the recovery of hazardous and/or valuable material, restoration of the area and/or facilities to normal use, and the formulation of measures to prevent the future occurrence of similar radiological incidents.
- b. Emergency medical assistance by ERDA radiological assistance team medical personnel is limited to measures necessary to save life and to minimize immediate injury at the incident scene. If requested by the injured individual or his physician, the team physician may give advice regarding hospitalization and further definitive treatment. At the request of a patient or his physician, medical advice and consultation is available through the ERDA from physicians specializing in the treatment of radiation exposure cases, and special medical facilities that are not otherwise available to the patient or his physician may be made available for the diagnosis and treatment of radiation injury.

8. Onsite Radiological Incidents

- a. Radiological incidents onsite are those that occur in facilities, areas, or at locations where government or private authorities exercise control over access by such means as locked doors, secured fences, guards, or security devices.
- b. The individual or organization in control of the site on which a radiological incident has occurred has the initial jurisdiction over emergency operations. However, this jurisdiction may be temporarily relinquished to an appropriate local civil authority responsible for emergency services (e.g., police, health, fire, rescue, civil defense, etc.) to assure the most effective action for the protection of people and property during the emergency. ERDA radiological assistance operations conducted on a site not under the jurisdiction of the ERDA are normally those emergency actions approved or requested by the individual or organization in control of the site or an appropriate local civil authority. However, if necessary for the protection of health or safety and the responsible civil authority is not available, independent protective action would be taken.
- c. In the event of an onsite incident involving ERDA nuclear weapons, peaceful nuclear explosives, or components thereof, or radioactive

or classified materials at a site not under AEC control, AEC authority and jurisdiction extend only over the physical items themselves.

- d. In the event of an onsite incident or accident involving nuclear weapons, weapons components, or radioactive materials in DOD custody or in the possession of a Military Service the emergency response procedures implementing DOD-ERDA agreements are followed (see H.2. and 3., above).
- e. If an onsite radiological incident is believed or expected to have offsite effects, the RCO responsible for radiological assistance in that area will immediately initiate appropriate actions for protecting the public health and safety from radiological hazards. However, when the incident has occurred on an ERDA site, offsite emergency action is conducted in accordance with the emergency plan for ERDA operations at that site and radiological assistance capabilities may or may not be called upon.
- f. ERDA field organization offices in need of onsite radiological emergency assistance from resources outside their jurisdiction may request assistance from:
 - (1) another ERDA office,
 - (2) another Federal agency under IRAP provisions,
 - (3) state or local government agencies as provided under special agreements, or
 - (4) the DOD through the JNACC.

9. Offsite Radiological Incidents

- a. Radiological incidents offsite usually occur in areas or at locations where the governmental or private authorities having jurisdiction permit access by the public and do not exercise control over access by such means as guard personnel, security devices, or physical barriers such as locked doors and secured fences. Examples of offsite areas and locations are public roads and streets, private roads, recreational areas, unattended unoccupied buildings and railroad rights-of-way.
- b. The authority having jurisdiction over the area and/or location at which an offsite radiological incident has occurred is normally in charge of emergency operations. However, the authority first on the incident scene usually takes charge of emergency operations and yields to transcendent authority when its representative arrives. Therefore, when the ERDA radiological assistance team is first on the scene of an offsite incident, the ERDA representative or team leader will take charge unless there is other authority on the scene that transcends the ERDA authority. When the appropriate

authority is in charge, ERDA radiological assistance will provide advice and information and such emergency assistance as is requested by the authorities in charge except for such offsite actions as the ERDA believes are necessary for the protection of the public health and safety.

- c. In the event of an offsite incident or accident involving ERDA nuclear weapons, peaceful nuclear explosives, or components thereof, or radioactive or classified materials, ERDA authority and jurisdiction extend only over the physical items themselves. Therefore, the cooperation of the appropriate local government and private authorities (including private property owners) is necessary to the conduct of ERDA radiological emergency operations at the scene.
- d. In the event of an offsite incident or accident involving nuclear weapons, weapons components, or radioactive materials in DOD custody or in the physical possession of a Military Service, the ERDA follows the emergency response procedures implementing the aforementioned DOD-ERDA agreements. When DOD authorities arrive at the accident scene, they assume responsibility for the Federal agency radiological emergency operations and coordination with other government and private organizations. The ERDA would then provide radiological assistance as requested by the DOD authority in charge (see H.2., and 3., above).
- e. Offsite incidents may occur during transportation by common carrier, privately owned and operated vehicle, or Federally owned vehicle. Incidents involving radioactive materials shipments temporarily stored at transfer points during shipment are considered to have occurred during transportation but are handled as onsite incidents (see 8., above).
- f. ERDA radiological assistance responses to transportation incidents involving nuclear weapons, weapons components, or radioactive materials in DOD custody or in the physical possession of a Military Service are conducted in accordance with the provisions of the aforementioned DOD-ERDA agreements and procedures for coordinating the DOD-ERDA response to such incidents which are issued by appropriate Headquarters authority and AL (see H.2. and 3., above).
- g. Radiological assistance operations on the scene of offsite radiological incidents are conducted generally as described in 6., above. However, the following additional procedures are followed when appropriate:
 - (1) ERDA radiological assistance responses are carried out at the incident scene in cooperation with Federal, state, and local government authorities or private officials who have jurisdiction over the land, facilities, or radioactive material involved and in a manner not intended to abridge state or local government authority.

- (2) ERDA officials recommend that other radiological services take over the radiological emergency protection, recovery, removal, and restoration activities from the ERDA radiological assistance team at the incident scene as soon as the authority responsible for the radioactive material or his representative arrives, and the immediate threat to the public health and safety has been brought under control, except when the ERDA is the responsible authority.
- (3) In the event that the consequences of a radiological incident might extend beyond the immediate area of the incident and might adversely affect the community, the environment, commerce, industry, or the public health and safety, the responsible RCO activates its radiological assistance response procedures for initiating and coordinating regional interagency emergency response operations by the appropriate Federal, state, and local government agencies and private organizations.

K. NOTIFICATIONS AND REPORTS

1. General

- a. Accidents, losses of material, and radiation exposures in ERDA operations are reported and investigated in accordance with ERDAM 0502, "Notification, Investigation, and Reporting of Occurrences." ERDAM 0502 also specifies standards for notification and investigation, and establishes the requirement to report to Headquarters those incidents wherein ERDA radiological assistance is requested or directed to respond for the protection of health and safety.
- b. Radiological incidents involving radioactive materials are reported to other Federal agencies in accordance with the provisions of the IRAP (exhibit 11) and the reporting procedures in ERDA Regional Radiological Assistance Plans.
- c. Originating field and Headquarters offices shall maintain on file one copy of each radiological incident report they submit to other ERDA offices or agencies. The originating offices also shall maintain on file one copy of all supporting documentation such as personal depositions, notes, photographs, and reports by other organizations.
- d. Incidents involving nuclear weapons, weapons components, or radioactive materials in DOD custody or in the physical possession of a Military Service are reported to the ERDA element of JNACC by ERDA offices. Other agencies, organizations, or individuals may report such incidents to either the ERDA or DOD element of JNACC or any ERDA office or military installation.
- e. ERDA contractors report radiological incidents to the appropriate ERDA offices in accordance with instructions and procedures issued to ERDA contractors. Licensees report radiological incidents in

accordance with the licensing rules and regulations of the NRC. It is recommended that licensees request radiological assistance in addition to reporting the incident to the NRC. However, there is no mandatory requirement for either contractors or licensees to request radiological assistance.

2. Headquarters

- a. When a Headquarters division or office receives notification of a radiological incident, the cognizant official will notify the Division of Operational Safety and, if the incident is believed to involve nuclear weapons, peaceful nuclear explosives, or components thereof, the Division of Military Application also.
- b. When the Division of Operational Safety receives a radiological incident report, notification is given to:
 - (1) the appropriate RCO (including AL for the ERDA element of JNACC), if it has not been notified;
 - (2) the Office of the Administrator, Division of Military Application, Division of Safeguards and Security, Office of Public Affairs, and other Headquarters divisions and offices, as may be appropriate;
 - (3) the NRC Office of Inspection and Enforcement when licensed radioactive materials, facilities or operations are involved;
 - (4) the appropriate headquarters offices of IRAP signatory agencies, when necessary to activate an interagency coordinated response; and
 - (5) specific agencies ERDA has agreed to notify when appropriate.

3. All Field Organization Offices

- a. In addition to reporting radiological assistance occurrences in accordance with ERDAM 0502, field organization offices that do not have RCO responsibilities report radiological assistance requests and non-ERDA radiological incidents to the RCO responsible for radiological assistance activities in the radiological assistance region in which the incident is discovered.
- b. Field organization offices notify the Division of Operational Safety, telephone (301-973-3222) when:
 - (1) an ERDA field office official dispatches radiological assistance;
 - (2) it is believed that a radiological incident involves licensed radioactive materials, facilities or operations;

- (3) there is reason to believe that the public health and safety may be affected;
 - (4) information concerning the radiological incident and/or the response has been released to the news media or the public; or
 - (5) it is decided to terminate radiological assistance response action.
- c. Report all radiological assistance responses in writing to the Director, Division of Operational Safety within 30 days of the termination of ERDA radiological assistance operations. The report shall contain as much of the following information applicable to the incident and response as is readily available:
- (1) full identification of the office and/or ERDA official submitting the report. (Any part of the report prepared by a contractor should be identified with the contractor and contractor official who submitted it.);
 - (2) date and time that the request for radiological assistance or notification of the radiological incident was received and the means of communication used (i.e., telephone, radio, teletype, or other);
 - (3) all available information on the occurrence such as:
 - (a) date and time of incident;
 - (b) location and description of the incident site;
 - (c) injuries, deaths, radiation exposures, and other effects on people (i.e., hysteria, panic, fear, and illness);
 - (d) immediate actions taken by individuals and agencies prior to the arrival of an ERDA radiological assistance team;
 - (e) identification of the radioactive material involved, including its isotopic nature, configuration, gram and curie quantities, use and/or location at the time of the occurrence, and the individual or organization responsible for the radioactive material;
 - (f) physical damage to property;
 - (g) identification of people directly or indirectly involved in the incident;
 - (h) description of facilities and equipment involved with the incident;
 - (i) weather conditions;

- (j) description of conditions at the scene of the incident;
and
 - (k) sequence of events from first discovery of the incident through the notification of the office(s) providing radiological assistance.
- (4) Names, home addresses, and telephone numbers and names and addresses of employers, as appropriate, of all individuals named or referred to in the report;
 - (5) Evaluation of the radiological hazards to individuals and the public found to be actually or potentially present as a result of the incident and the countermeasures taken;
 - (6) Evaluation of the radiological hazards remaining from the incident and recommendations made to reduce the hazards to acceptable levels;
 - (7) Plans for the recovery of radioactive material and return of land, facilities, and equipment to their preoccurrence condition and use, including the identification of the agency, company, or authority planning to carry out those actions;
 - (8) Photographs, drawings, and other items containing information pertinent to the radiological assistance operations and the incident;
 - (9) Observations, suggestions, and comments that may be helpful in preventing similar occurrences or in improving radiological assistance capabilities and operations; and
 - (10) Text of information released to the public and the press during radiological assistance operations.
- d. Field organization offices report to the ERDA element of JNACC immediately:
- (1) reports and requests for assistance concerning incidents involving nuclear weapons, peaceful nuclear explosives, or components thereof, or radioactive materials in DOD custody or in the physical possession of a Military Service;
 - (2) a need for DOD radiological assistance resources to assist the ERDA in radiological emergency operations;
 - (3) a request from a Military Service for ERDA radiological assistance; and
 - (4) when the radiological assistance team capabilities of any ERDA facility reported to JNACC (see I.1.d., above) are unavailable to be dispatched upon request.

4. Regional Coordinating Offices (RCO's) report radiological incidents, requests for radiological assistance, and response actions as follows:
 - a. RCO's that receive a report or request for assistance which concerns a radiological incident that has occurred in another radiological assistance region immediately report the available information to the appropriate responsible RCO and request it to assume responsibility for the assistance response.
 - b. RCO's provide procedures in their regional radiological assistance plans for reporting radiological incidents to other Federal agencies as is appropriate to implement Regional Coordinating Office activities stated in annex II of the IRAP (exhibit 11).
 - c. RCO's report radiological incidents to state or local government agencies in accordance with agreements between the RCO and individual agencies within each ERDA radiological assistance region (exhibit 1).
 - d. RCO's assure that the appropriate NRC Inspection and Enforcement Regional Offices will be promptly notified of all incidents believed to involve licensed radioactive material, facilities or operations whether NRC or state licensed.
 - e. RCO's initiate regional interagency radiological assistance responses of Federal agencies signatory to the IRAP.
 - f. The AL RCO, in addition to the above, reports to the Division of Military Application all incidents and accidents involving nuclear weapons, or weapons components, a Military Service, or peaceful nuclear explosives or components thereof, which are reported to the ERDA element of JNACC.

L. REGIONAL RADIOLOGICAL ASSISTANCE PLANS

1. Purpose

Regional plans implement the ERDA radiological assistance policy set forth in this Plan and the other provisions of this Plan. These regional plans include procedures, instructions, and guidelines which meet or exceed the minimum requirements of this Plan.

2. Geographical Assignments

Managers of the ERDA Albuquerque, Chicago, Idaho, Oak Ridge, Richland, San Francisco, and Savannah River Operations Offices and the Brookhaven Area Office are assigned geographical regions of responsibility for Radiological Assistance operations in accordance with ERDAM 0601-0327 and exhibit 1 to this Plan.

3. Availability of Regional Plans

Copies of the regional radiological assistance plans for each of the eight geographical regions may be obtained from the eight respective Regional Coordinating Offices listed in exhibit 1 to this Plan.

EXHIBIT 1

U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

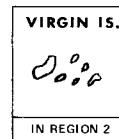
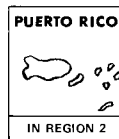
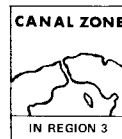
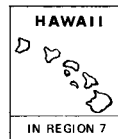
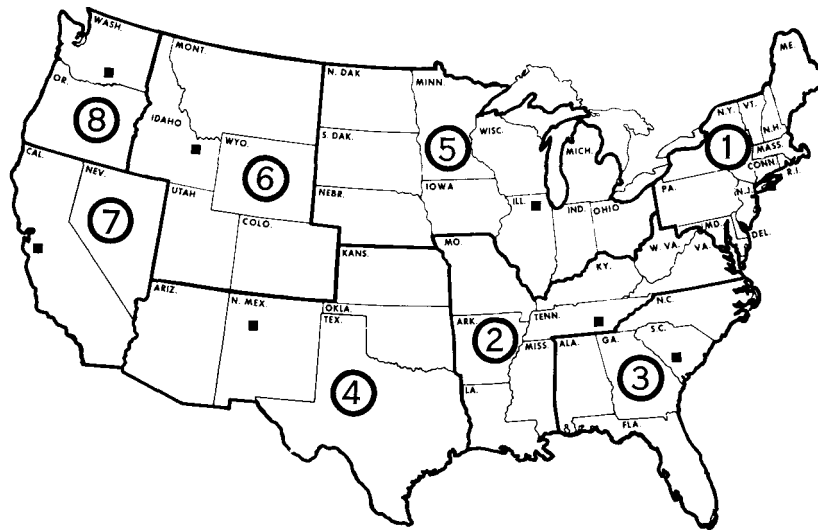
REGIONAL COORDINATING OFFICES

FOR

RADIOLOGICAL ASSISTANCE

AND

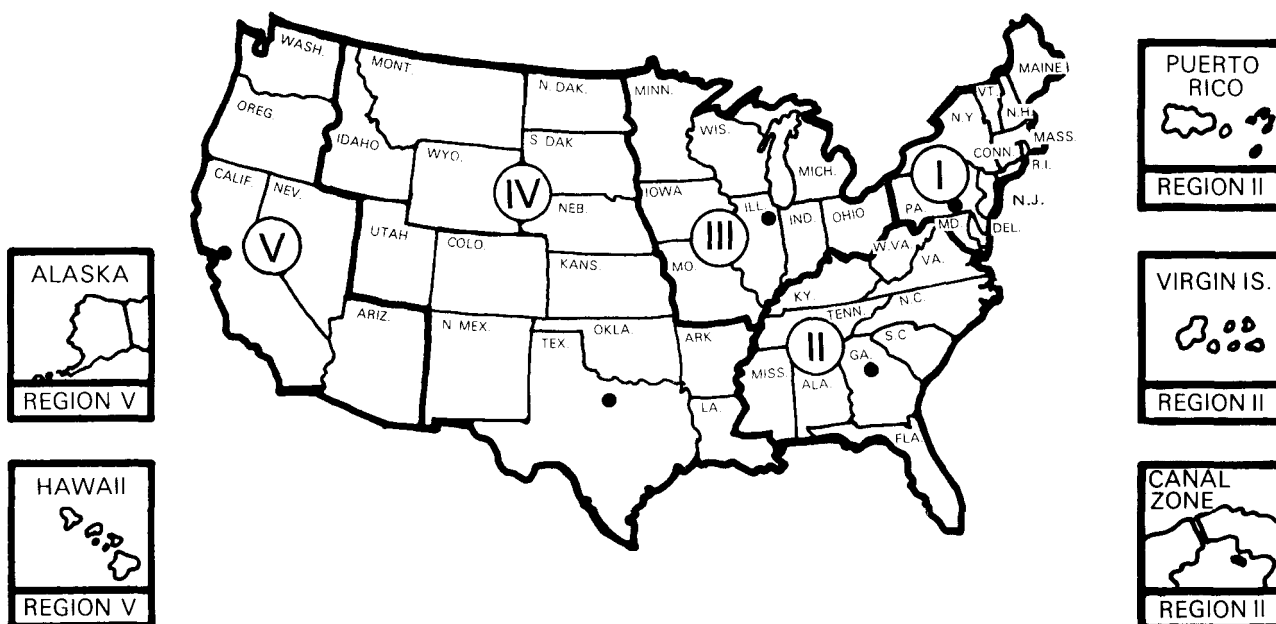
GEOGRAPHICAL AREAS OF RESPONSIBILITY



REGIONAL COORDINATING OFFICE	POST OFFICE ADDRESS	TELEPHONE for ASSISTANCE	D D D AREA CODE
① BROOKHAVEN AREA OFFICE	UPTON, L. I. NEW YORK 11973	345 2200	516
② OAK RIDGE OPERATIONS OFFICE	P. O. BOX E OAK RIDGE, TENNESSEE 37830	483-8611, Ext. 3-4510	615
③ SAVANNAH RIVER OPERATIONS OFFICE	P. O. BOX A AIKEN, S. C. 29801	N. AUGUSTA, S.C. 824-6331, Ext. 3333	803
④ ALBUQUERQUE OPERATIONS OFFICE	P. O. BOX 5400 ALBUQUERQUE, NEW MEXICO 87115	264-4667	505
⑤ CHICAGO OPERATIONS OFFICE	9800 S. CASS AVE. ARGONNE, ILLINOIS 60439	739-7711 Ext. 2111 duty hrs. Ext. 4451 off hrs.	312
⑥ IDAHO OPERATIONS OFFICE	P. O. BOX 2108 IDAHO FALLS, IDAHO 83401	525-0111 Ext. 1515	208
⑦ SAN FRANCISCO OPERATIONS OFFICE	1333 BROADWAY OAKLAND CALIFORNIA 94612	273-4237	415
⑧ RICHLAND OPERATIONS OFFICE	P. O. BOX 550 RICHLAND, WASHINGTON 99352	942-7381	509

Revised: January 1975

EXHIBIT 2



UNITED STATES NUCLEAR REGULATORY COMMISSION

Regional Inspection and Enforcement Offices

REGION	ADDRESS	TELEPHONE	
		DAYTIME	NIGHTS AND HOLIDAYS
I	Region I, Inspection and Enforcement, USNRC 631 Park Avenue King of Prussia, Pennsylvania 19406	215 337-1150	215 337-1150
II	Region II, Inspection and Enforcement, USNRC Suite 818, 230 Peachtree Street, N.W. Atlanta, Georgia 30303	404 526-4503	404 526-4503
III	Region III, Inspection and Enforcement, USNRC 799 Roosevelt Road Glen Ellyn, Illinois 60137	312 858-2660	312 858-2660
IV	Region IV, Inspection and Enforcement, USNRC Suite 1000, 611 Ryan Plaza Drive Arlington, Texas 76012	817 334-2841	817 334-2841
V	Region V, Inspection and Enforcement, USNRC Suite 202, Walnut Creek Plaza, 1990 N. California Boulevard Walnut Creek, California 94596	415 486-3141	415 486 3141

EXHIBIT 3

JOINT DEPARTMENT OF DEFENSE
AND
ATOMIC ENERGY COMMISSION
AGREEMENT IN RESPONSE TO ACCIDENTS
INVOLVING RADIOACTIVE MATERIAL
9 MAY 1966

1. Purpose

To set forth the general areas of responsibility and general procedures required for prompt, effective and coordinated response to accidents involving radioactive material.

2. Cancellation

This Agreement updates the "Joint Department of the Army, Navy, Air Force, and Atomic Energy Commission Agreement of General Areas of Responsibility and Procedures Applicable to the Prompt, Effective and Coordinated Response to Accidents Involving Nuclear Weapons" dated 27 February 1958, and existing memorandum of understanding on the same subject authorized thereunder, are superseded and cancelled.

3. Implementation

The Military Services, Defense Atomic Support Agency, and Atomic Energy Commission will issue instructions to implement this agreement.

4. Responsibilities

- a. The DOD or AEC official first to arrive at an accident scene will assume initial control of emergency operations and take such immediate action, within the limits of his capability, as may be necessary. The official will remain in control until relieved by the commander of the military installation or AEC facility nearest the accident or by a representative of the service or agency having the primary responsibility as set forth in paragraph c or d below.
- b. The commander of the military installation or AEC facility nearest the accident will assume control of emergency operations and take such action, within the limits of his capability, as may be necessary. The commander will remain in control until relieved by a representative of the service or agency having the primary responsibility as set forth in paragraph c or d below.

- c. Primary command responsibility for control at the scene of an accident, except under circumstances set forth in d below, rests with the service or agency having physical possession of the material at the time of the accident. Control at the scene will be assumed as soon as possible by the representative of the responsible service or agency.
- d. Primary command responsibility for control in the area where action is required in connection with accidents of a domestic emergency nature will rest with the Department of the Army. The term "domestic emergency" applies to emergencies occurring in and affecting the public welfare of the United States, its territories and possessions, as a result of enemy attack, insurrection, civil disturbances, earthquakes, fire, flood, and other public disasters or equivalent emergencies which disrupt the usual process of government.
- e. DASA and the AEC will operate a Joint Nuclear Accident Coordinating Center (JNACC) to provide and perform the functions and mission set forth in paragraph 5c below. Assistance and information may be requested from the JNACC at any time.
- f. The Military Services, DASA and the AEC will respond to requests from JNACC for mutual assistance subject to command and operational limitations.

5. Procedures

- a. The Military Services, DASA, and the AEC will provide JNACC with information necessary for the maintenance of current records reflecting the location and capability of specified units and teams which can be used for emergency radiological accident operations.
- b. When the services of the JNACC are being employed, commanders concerned shall keep JNACC informed of the status of the effort at the accident scene and the identity and location of the on-the-scene commander.
- c. The "mission" and the principal "task and functions" of the JNACC are as set forth below.

(1) Mission

To provide a centralized agency for exchanging and maintaining information concerned with radiological assistance capabilities and coordinating assistance activities, when called upon, in connection with accidents involving radioactive materials.

(2) Principal Task and Functions

- (a) Maintain current information as to the location and availability of specialized DOD and AEC teams or organizations capable of responding to accidents involving radioactive materials.
- (b) Receive notification of accidents and requests for assistance.
- (c) Request necessary assistance from appropriate DOD or AEC teams or organizations.
- (d) Provide available accident information to appropriate commands and agencies.
- (e) Obtain all available information regarding the radioactive material involved in the accident for relay to the accident scene.
- (f) Refer public queries to the service or agency having primary command responsibility as described in paragraph 4c above.
- (g) Furnish essentials of the JNACC operational procedures to all participants.

6. Reimbursement for Emergency Assistance Expense

The Military Service or Agency providing the necessary assistance will fund such costs initially within existing fund availability. The Military Service or Agency having physical possession of the weapon or radiological material at the time of the accident will be responsible for reimbursing, upon request, the Military Service or Agency providing the necessary assistance for those costs which are in addition to normal operating expenses and which are directly chargeable to, and caused by, the radiological accident.

By authority of the Secretary of Defense and the Atomic Energy Commission:

For the Department of Defense:

For the Atomic Energy Commission:

original signed by

original signed by

Cyrus Vance
Deputy Secretary of Defense

Glenn T. Seaborg
5/9/66

EXHIBIT 4

JOINT DEPARTMENT OF DEFENSE AND ATOMIC ENERGY COMMISSION* MEMORANDUM OF UNDERSTANDING FOR AEC RESPONSE TO ACCIDENTS INVOLVING NUCLEAR WEAPONS IN THE CUSTODY OF DOD

1. Purpose and Scope

This memorandum provides for immediate Atomic Energy Commission (AEC) response to accidents involving nuclear weapons in the custody of the Department of Defense (DOD). It supplements the "Joint DOD-AEC Agreement in Response to Accidents Involving Radioactive Material," Dated May 9, 1966, for peacetime U.S. nuclear weapons accidents occurring anywhere in the world which have an actual or potential adverse impact on public health and safety.

2. Policy

The Department of Defense is responsible for identifying and resolving health and safety problems connected with the custody and storage of nuclear weapons in its custody. The Atomic Energy Commission will participate in the consideration of these problems as a matter of continuing responsibility.

3. General

The Atomic Energy Commission Accident Response Group comprises technical specialists and equipment on continuous alert and prepared for dispatch to the scene of a nuclear accident at the earliest possible time after notification. The Group's specific composition in any given situation will be that best calculated to meet the needs of the responsible DOD component. While at the scene, the Accident Response Group will be under the control and public information policy of the DOD On-Scene Commander. Information which relates to AEC activities at the accident scene will be coordinated with the AEC Representative prior to public release.

4. Implementation

The Military Departments, Defense Atomic Support Agency, and Atomic Energy Commission will develop and exchange documents which prescribe instructions and operating procedures to implement this memorandum.

*This agreement is now effective between ERDA and DOD.

5. Responsibilities

a. Atomic Energy Commission

- (1) The AEC will dispatch an AEC Accident Response Group and any necessary specialized equipment to the scene of the accident upon authorization of the Assistant General Manager for Military Application (AGMMA),* AEC, after consultation with the designated DOD point of contact.
- (2) The Accident Response Group will be headed by an AEC staff member designated as the AEC Representative and will include a Senior Scientific Advisor (normally a senior staff member of an AEC contractor-operated weapons laboratory).
- (3) The AEC Representative will:
 - (a) direct the activities of the AEC Accident Response Group.
 - (b) insure coordinated AEC support for the DOD On-Scene Commander in all matters pertaining to the mission of the Accident Response Group.
 - (c) advise the DOD On-Scene Commander of any requirement for additional AEC response capabilities and coordinate the provision of such additional response as may be mutually agreed upon.
- (4) The Senior Scientific Advisor of the Accident Response Group may, with the concurrence of the AEC Representative, be designated by the DOD On-Scene Commander to serve as the Scientific Advisor to the DOD Commander.
- (5) The AEC Accident Response Group mission will include provision of the following support to the DOD On-Scene Commander:
 - (a) Technical advice and assistance for determining the extent of any radioactive hazards.
 - (b) Technical advice to minimize hazards to the public.
 - (c) Technical advice and assistance in the collection, identification and disposition of weapons components, weapon debris, and contaminated material.
 - (d) Technical advice and assistance in the identification and protection of nuclear weapon design information and other Restricted Data.

*The AGMMA responsibilities and authorities have been transferred to the Assistant Administrator for National Security, ERDA.

- (e) Support to the DOD On-Scene Commander in onsite discussions with foreign or local government officials on matters within areas of special AEC competence.

b. Department of Defense

- (1) The DOD will immediately notify the AEC of the occurrence of an accident. Notification procedures will be in accordance with DOD Directive 7730.12, "Nuclear Weapon Accident and Significant Incident Notification Procedures." In addition, the appropriate Military Service and DASA will advise the AGMMA, AEC, of the designated point of contact for coordinating the AEC response to the accident.
- (2) The responsible DOD component will provide administrative, medical, and logistic support services (including communications and necessary military transportation) for the AEC Accident Response Group to perform its mission. The extent of these support services will be governed by the accident location, environment associated therewith, type of accident, and the capability of the AEC to support itself.

6. Funding

Funding policies of the May 9, 1966, Agreement will apply.

Signed by Glenn T. Seaborg
Chairman, Atomic Energy Commission
June 10, 1970

Signed by David Packard
Secretary of Defense
May 20, 1970

EXHIBIT 5

REPORT NO. WASH 1274

GUIDANCE AND INFORMATION
ON
NUCLEAR WEAPONS ACCIDENT HAZARDS
PRECAUTIONS, and EMERGENCY PROCEDURES

This unclassified booklet was prepared jointly by the U.S. Atomic Energy Commission and Department of Defense to provide guidance for those members of the public who might become involved in the event of an accident where the presence of nuclear weapons is known or suspected. The booklet describes the hazards that might occur from an accident involving nuclear weapons. The emergency procedures to be followed by the first member of the public to arrive on the accident scene and the actions to be taken by local fire, police, and other emergency personnel are discussed. The responsibilities at the accident scene for saving people from injury, for protection of the nuclear weapons material, and the agreement between the AEC and DOD for the direction of emergency operations is summarized.

This booklet was originally published as a DOD-AEC technical information bulletin in 1958 which was revised in 1966. It has received wide distribution among Federal, state, and local government emergency organizations and private industry such as the commercial transportation companies. Copies are available free of charge from ERDA Regional Coordinating Offices (exhibit 1) and the Division of Operational Safety, USERDA Headquarters, Washington, D.C. 20545.

EXHIBIT 6

U. S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

EMERGENCY ACTION GUIDELINES FOR INCIDENTS INVOLVING RADIOACTIVE MATERIAL (Revised: January 1975)

When incidents involve the spillage or release of radioactive material, or there are personal injuries in incidents involving radioactive materials, the following emergency actions and precautions should be applied:

1. Notify immediately (insert appropriate office). The telephone number is (insert appropriate number). Request radiological emergency assistance. Request medical assistance if it appears that anyone is injured.
2. Make every effort possible to rescue injured or trapped persons and remove them from the incident area.
3. Unless given by a physician, immediate first aid should be limited to those procedures necessary to save life or minimize injury.
4. When it is necessary to send an individual to a hospital or other medical facility BEFORE a radiological emergency team or physician knowledgeable in radiological health arrives, inform ambulance and other transporting vehicle personnel who will be in contact with the individual, of the possibility of radioactive contamination. Also, inform the hospital or medical facility that the individual may be contaminated with radioactive material.
5. When in doubt that the radioactive material is still confined to its container, assume that the immediate incident area is radioactively contaminated and that anyone and anything in the area MAY BE contaminated; and take special care to minimize personal contact with the outer clothing of individuals, the surface of the ground, vegetation, and the surfaces of things within or removed from the incident area.
6. Individuals not removed to a hospital or other medical facility and who are suspected of having been exposed to radioactive material should be detained until they can be appropriately monitored.
7. Obtain the names and addresses of all persons involved, including those who cannot be detained and those removed for medical attention.

8. Restrict access to the incident area and prevent unnecessary handling of incident debris. Keep the public away from the incident area as much as possible.
9. Fight fire as though toxic chemicals are involved. To the extent possible, keep upwind and avoid smoke, fumes and dust. Segregate clothing and tools used at the fire until they can be checked for radioactive contamination before being returned to normal use.
10. When a transportation incident involves radioactive material, DO NOT move vehicles, shipping containers or wreckage except to rescue people. Detour pedestrian and vehicular traffic. If a right-of-way must be cleared before radiological emergency assistance arrives, move vehicles and debris the shortest distance required to open a pathway. Before permitting the passage of traffic, spillage on the cleared pathway should be washed, or wetted and swept, to the edge of the pathway with a minimum dispersal of wash water and spilled material.
11. DO NOT eat, drink, or smoke in the incident area, or use food or drinking water that may have been in contact with radioactive material.
12. DO NOT handle, use or remove from the incident area any material, equipment or other items suspected of being radioactively contaminated unless released by radiation monitoring personnel.

EXHIBIT 7

RADIOLOGICAL EMERGENCY PROCEDURES
FOR THE
NONSPECIALIST
JANUARY 1969

This booklet was prepared for the Interagency Committee on Radiological Assistance and published by the U.S. Atomic Energy Commission. It is on sale to the public through the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 at 50 cents per copy post paid. A large number of copies has been distributed in connection with the promulgation of ERDA regional radiological assistance plans and procedures and the encouragement of radiological emergency preparedness by other organizations.

The booklet is designed to provide fundamental information that the ordinary layman can use for taking immediate action in case he finds himself at the scene of an accident involving radioactive materials. The text is written with a minimum of technical terminology and attempts to place radiological hazards in their proper perspective relative to the various hazards which we have become accustomed to facing daily. The text is illustrated with charts, tables, and photographs.

EXHIBIT 8

RADIOLOGICAL ASSISTANCE RESOURCES

1. Professional Personnel in radiological protection, industrial hygiene, safety, fire protection, medicine, physical sciences, biological sciences, agricultural sciences, nuclear weapons safety, engineering, waste disposal, environmental science and other disciplines.
2. Technical Personnel in photography, radiological monitoring, instrumentation, radioactive materials handling, nuclear weapons safety, security, fire fighting, communications, equipment operation, radio analytical procedures, environmental sampling, transportation, and other technical areas.
3. Equipment for personnel protection, transportation of people and material, construction, fire fighting, materials handling, communications, radiation monitoring, remote viewing, photography, rescue operations, waste storage and transportation, decontamination, laboratory services, field operations support, and other uses.
4. Facilities for biological assay analysis, chemical analysis, radio analysis, maintenance, decontamination, radioactive waste disposal, medical services, housing, feeding, personnel dosimetry, radiation exposure evaluation, mobile radiological emergency operations support, and other specialized services.
5. Materials for radiation shielding, decontamination operations, contamination control, and other operations requiring bulk quantities of special materials.
6. Services for support of radiological emergency operations which employ personnel, equipment, facilities and materials for the purpose of performing particular functions, such as equipment maintenance and repair, personnel dosimetry, analytical laboratory work, personnel and equipment decontamination, fire fighting, and security.

EXHIBIT 9

SUMMARY OF REGIONAL
U.S. ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION
RADIOLOGICAL ASSISTANCE TEAM CAPABILITIES

Region No. and Regional Coordinating Office	States in Region	City Nearest Place of Team Origin ERDA Office and/or Contractor from which radiological as- sistance teams are dispatched	Radiological Emergency Monitoring Advice and Assistance Include:						
			α , β , and γ radiation survey	Radiation Monitoring Of:			Medical Advice	Decontamination	Laboratory Analysis
				Air	Water	Other			
A	B	C	D	E	F	G	H	I	J

Brookhaven Area Office	1.	N.Y.	Upton, L.I. (Brookhaven Area Office - Associated Universities Inc., BNL)	X	X	X	X	X	X
			New York City (ERDA Health & Safety Lab.)	X	X	X	X	X	X
			Rochester (Univ. of Rochester ERDA Project)	X	X	X	X	NA ²	X
			Schenectady (SNR - General Electric Co., Knolls Atomic Power Lab.)	X	X	X	X	X	X
		Pa.	Pittsburgh (PNR - Westing- house Electric Corp. Bettis Plant)	X	X	X	X	X	X

There are no ERDA radiological assistance teams in Maryland, Massachusetts, Maine, New Hampshire, Vermont, Connecticut, New Jersey, Delaware, Rhode Island, District of Columbia.

Oak Ridge Operations Office	A	B	C	D	E	F	G	H	I	J
	2.	Tenn.	Oak Ridge (OR - Holifield National Lab. - Union Carbide Corp. Nuclear Div.)	X	X	X	X	X	X	X
		Ky.	Paducah (Union Carbide Corp. Nuclear Division)	X	X	X	X	X	X	X
		Mo.	Kansas City (Kansas City Area Office - Bendix Corporation)	X	X	X	X	X	X	X
		P.R.	San Juan (Puerto Rico Nuclear Center)	X	X	X	X	X	X	X

There are no ERDA radiological assistance teams in Virginia, West Virginia, Arkansas, Louisiana, Mississippi, Virgin Islands.

Savannah River Opns. Office	3.	S.C.	Aiken (SR - E.I. du Pont de Nemours & Co., Savannah River Plant)	X	X	X	X	X	X	X
		Fla.	St. Petersburg (Pinellas Area Office - General Electric Company)	X	X	X	X	X	X	NA

There are no ERDA radiological assistance teams in North Carolina, Alabama, Georgia, Canal Zone.

A	B	C	D	E	F	G	H	I	J
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Albuquerque Operations Office	4.	N.M.	Albuquerque (AL - Sandia Corporation)	X	X	X	X	X	X
			Los Alamos (Los Alamos Area Office - Los Alamos Scientific Lab., Univ. of California)	X	X	X	X	X	X
		Texas	Amarillo (Amarillo Area Office - Pantex Plant)	X	X	NA	NA	X	NA

There are no ERDA radiological assistance teams in Oklahoma, Arizona, Kansas

Chicago Operations Office	5.	Ill.	Argonne (CH - Univ. of Chicago, ANL)	X	X	X	X	X	X
		Ohio	Miamisburg (Dayton Area Office - Monsanto Research Corp.)	X	X	X	X	X	X
			Portsmouth (Portsmouth Area Office-Goodyear Atomic)	X	X	X	X	X	X
			Cincinnati (Cincinnati Area Office - National Lead Co.)	X	X	X	X	X	X
			Columbus (Battelle Memorial Institute)	X	X	X	X	NA	X
		Iowa	Ames (Iowa State Univ., Ames Laboratory)	X	X	X	X	X	X

There are no ERDA radiological assistance teams in North Dakota, South Dakota, Nebraska, Indiana, Michigan, Minnesota, Wisconsin

A	B	C	D	E	F	G	H	I	J
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Idaho Operations Office

6.	Id.	Idaho Falls (ID - Aerojet Nuclear Corp., Allied Chemical Corp)	X	X	X	X	X	X	X
	Wyo.	Casper (GJ-Casper Br. Offc)	X	NA	NA	NA	NA	X	NA
	Colo.	Grand Junction (GJ)	X	X	X	X	NA	X	NA
		Denver (Rocky Flats Area Office - Dow Chemical Co., Rocky Flats Div.)	X	X	X	X	X	X	NA
	Utah	Salt Lake City (GJ Salt Lake City Office)	X	NA	NA	NA	NA	NA	NA

There are no ERDA radiological assistance teams in Montana.

San Francisco
Opns. Office

7.	Calif.	Oakland (SAN-U. of Calif. Berkeley)	X	X	X	X	X	X	X
		Livermore (U. of Calif. Livermore)	X	X	X	X	X	X	X
		Los Angeles (Canoga Park Office - Atomics Internatl.)	X	X	X	X	X	X	X
		San Diego (General Atomics)	X	X	X	X	X	X	NA
	Nev.	Las Vegas (NV - Reynolds Electrical & Engineering Co., Mercury, Nev.)	X	X	X	X	X	X	X

There are no ERDA radiological assistance teams in Hawaii.

Richland Operations Office

8.	Wash.	Richland (RL - Battelle Northwest Laboratory)	X	X	X	X	X	X	X
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There are no ERDA radiological assistance teams in Oregon, Alaska

¹Expert technical advice and assistance are always available, however, the capability of a specific team to carry out radiological emergency assistance operations, such as decontamination, will depend upon the extent of the problem and the personnel, equipment and other resources on hand at the incident scene.

²Not Applicable (NA)

EXHIBIT 10

RADIOLOGICAL ASSISTANCE TEAM MEMBER IDENTIFICATION CARD

UNITED STATES
ENERGY RESEARCH AND DEVELOPMENT ADMINISTRATION

RADIOLOGICAL ASSISTANCE TEAM

This identifies

as an official member of a U.S. Energy Research and
Development Administration Radiological Assistance
Team.

James L. Lawrence
Assistant Administrator
For Environment and Safety

Countersigned

FRONT

MOUNT
PHOTOGRAPH
WITH NAME
INCLUDED

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Washington, D.C. 20545

Form ERDA-39 5-75

BACK

Interagency Radiological Assistance Plan

Revised April 1975

Energy Research &
Development Administration



Interagency Radiological Assistance Plan

Energy Research &
Development
Administration

Preamble

The Interagency Radiological Assistance Plan (IRAP) was developed in 1961 by an interagency committee of Federal agency representatives as a means for providing rapid and effective radiological assistance in the event of a peacetime radiological incident. The IRAP provides a means whereby the participating Federal agencies may coordinate their radiological emergency related activities with those of state and local health, police, fire and civil defense agencies. The Plan also provides operating guidelines for interagency radiological emergency operations and training.

The Plan is intended to permit the application of existing Federal, State and local competencies, responsibilities and relationships in such a manner as to provide the most effective emergency action available for the protection of the public health and safety from radiological hazards.

Even though State governments are assuming an increasingly greater role in regulating the use of ionizing radiation, the Nuclear Regulatory Commission, the Energy Research and Development Administration, the Environmental Protection Agency, the Department of Health, Education and Welfare, and the Department of Defense will continue to exercise major responsibilities for the safe use of radioactive materials. The Defense Civil Preparedness Agency will continue to exercise its authority and responsibilities for aiding State and local governments in connection with major disasters and will also participate in the Federal response to radiological emergencies in accordance with the IRAP.

When a radiological incident is related to or occurs in connection with an actual or imminent emergency or major disaster as defined in this Plan, Federal radiological emergency assistance provided under this Plan would be used in support of and as an adjunct to the overall Federal response. This Plan is not intended to supersede or supplement the radiological fallout monitoring and reporting capabilities developed for activation under the National Civil Defense Preparedness Program. However, the civil defense capability would be used as needed to assist in coping with radiological incidents to which this Plan is applicable.

It is recognized that radiological emergencies may arise from sources not clearly identified. In such instances the first information concerning the situation may become known through law enforcement, civil defense, medical, or public health channels. If requests for Federal agency assistance are transmitted by the cognizant agencies into the information channels provided under this Plan, immediate action will be taken to respond to the emergency in the most appropriate and effective manner.

Interagency Radiological Assistance Plan

Purpose

The purpose of this Plan is to provide for:

1. prompt and effective radiological assistance as may be needed for the protection of health, safety and welfare from radiological hazards resulting from radiological incidents;
2. the coordination of Federal, State and local radiological assistance operations; and
3. the encouragement of the development of state and local plans and capabilities to cope with radiological incidents.

Objectives

1. Establish procedures to assure effective coordination of Federal, State, and local agency responses to radiological incidents and the use of their available resources as may be needed to carry on radiological assistance operations.
2. Establish a system for:
 - requesting and providing appropriate assistance;
 - reporting radiological incidents to the interested agencies, organizations, and the public; and
 - exchange of information between interested Federal, State and local agencies and other organizations.
3. Develop and promulgate radiological incident response information and training guidelines for Federal, State and local officials to familiarize them with the problems and hazards related to radiological incidents and the appropriate action to be taken.

Applicability

The provisions of this IRAP are applicable to all signatory Federal agencies. In the event of an emergency or major disaster radiological assistance under this Plan will be available to the Federal authority or agency in overall charge of operations as an adjunct to other disaster assistance and control resources and measures. Radiological assistance provided under this Plan would continue to be available during a national emergency declared by the President to the extent that the resources of the signatory agencies are not required for carrying out their national emergency functions and responsibilities.

Policy

1. Federal agencies signatory hereto will contribute the use of their facilities and personnel as may be needed for the development of an integrated Federal radiological assistance capability, and will make their resources available during radiological assistance operations, subject to prior commitments to fulfill essential operational requirements relative to their primary responsibilities.
2. IRAP operations shall be carried out to make maximum effective use of State and local as well as Federal capabilities. Coordination of incident response operations at the scene should be handled at the most appropriate governmental level.
3. A Federal agency making its resources available to another Federal agency or non-Federal organization does not place itself under the authority of such agency or organization. However, resources of a Federal agency assigned for emergency operations to a coordinating office or a responsible agency shall be under the general direction of such office or agency.

4. Federal organizations will make their existing radiological incident response personnel training capabilities available to State and local authorities to the extent practicable.
5. State and local authorities will be encouraged to develop and coordinate procedures for effective utilization of radiological incident response personnel training capabilities available in their locale and to establish State and local coordinating centers as necessary.

Organization and Responsibilities

1. The Interagency Committee on Radiological Assistance (ICRA) will consist of authorized representatives of the signatory Federal agencies listed in Annex IV. This Committee is responsible for interpretation, when necessary, of policy established by the Plan, for obtaining Federal agency approval of changes to that policy, for updating the Plan, and for assuring the respective agencies that the administration and implementation of the Plan are carried out in a manner consistent with applicable Federal Statutes and Executive orders.
2. The Energy Research and Development Administration is designated the agency responsible for directing the administration, implementation, and application of the provisions of the IRAP with the cooperation of the other participating Federal agencies. The ERDA will carry out its responsibility through a National Coordinating Office (NCO) at ERDA Headquarters and regional coordinating offices at ERDA field offices. The ERDA periodically shall inform the ICRA of the steps taken to implement ERDA responsibilities under the Plan.
3. All signatory Federal agencies are responsible for:
 - Making their resources available on request by the ERDA national or regional coordinating office that is responding to a radiological emergency. These resources will be available for radiological emergency operations subject to being committed to first fulfilling essential operational priority requirements of the signatory Federal agencies related to their primary responsibilities.
 - Providing an agency representative on the ICRA.
 - Furnishing radiological incident capability data and other pertinent information to national and regional coordinating offices as required.
 - Assuring that appropriate intra-agency actions are taken to implement the IRAP.
 - Carrying out their radiological assistance support functions and making their administrative and advisory capabilities available (see Annex V) within the scope of their respective legal authorities,

responsibilities and jurisdictions, as may be requested by the ERDA national or regional coordinating offices in the event of radiological incidents.

Concept of Operations

In addition to the ERDA, all signatory Federal agencies will establish coordinating offices at the national, regional, state or local levels as are necessary for them to carry out the provisions of the IRAP. Offices and personnel available for carrying on the agencies' normal activities will be utilized to provide the necessary facilities, staff, and technical operations personnel.

Operational details and responsibilities at the national, regional, state and local levels will be established as required to implement the purpose, objectives and policy of this Plan and to enable the ERDA and other signatory agencies to discharge their responsibilities under this Plan. Annex II, IRAP Operations, outlines certain criteria, duties, activities and action to provide a basis for radiological assistance operations.

Training

The Radiological Incident Response Training Guidelines are attached as Annex III.

Definitions for the Purpose of this Document

1. **Radiological assistance** means actions taken after a radiological incident to:
 - evaluate the radiological health hazard;
 - minimize personnel exposure to radiation and/or radioactive materials;
 - minimize the spread of radioactive contamination;
 - minimize damaging effects on property;
 - assist in carrying out emergency rescue and first aid procedures necessary to save life and minimize injury;
 - provide technical information to appropriate authorities and medical advice on the treatment of injuries complicated by radioactive contamination; and
 - provide information to the public as quickly as possible in order to minimize undue public alarm and to assist in the orderly conduct of emergency activities.
2. **Radiological incident** means an occurrence which results in the loss of control of radioactive materials resulting in a hazard or potential hazard to life, health or property.
3. **Resources** means administrative, technical, advisory, jurisdictional and command capabilities; and personnel,

facilities, equipment, services, supplies and other materials.

Coordinating office means an office responsible for coordination of IRAP implementing and operating activities within a specified geographical area.

5. A **local government** means any county, city, village, town, district, or other political subdivision of any state, and includes any rural community or unincorporated town or village for which an application for assistance is made by a state or political subdivision thereof.
6. **Emergency** means any sudden or unforeseen incident or occurrence in any part of the United States which requires immediate Federal emergency assistance to save lives, protect public health and safety or property, or to avert or lessen the threat of a disaster.
7. **Major disaster** means any hurricane, tornado, storm, flood, high water, wind-driven water, tidal wave, tsunami, earthquake, volcanic eruption, landslide, mudslide, snowstorm, drought, fire, explosion, or other catastrophe in any part of the United States which, in the determination of the President, causes damage of sufficient severity and magnitude to warrant major disaster assistance under PL 93-288, above and beyond emergency services by the Federal Government, to supplement the efforts and available resources of states, local governments, and disaster relief organizations in alleviating the damage, loss, hardship, or suffering caused thereby.
8. **National emergency** means a condition declared by the President or the Congress by virtue of powers previously vested in them which authorize certain emergency actions to be taken in the national interest. Actions to be taken may include partial or total

mobilization of national resources. (Department of Defense Dictionary of Military and Associated Terms, January 3, 1972-JCS Publication No. 1.)

Implementation

1. The provisions of this Plan are effective for each participating Federal agency which becomes a signatory agency to this Plan when an authorized official has signified in writing that the provisions of this Plan are acceptable to the agency he represents. (See Annex IV for a list of signatory Federal agencies.)
2. Signatory Federal agencies will promulgate intra-agency instructions necessary for the implementation of their participation in this Plan.
3. Implementation of this Plan will be compatible with and complementary to currently effective assistance plans, agreements, security regulations, and responsibilities based upon Federal Statutes and Executive orders (see Annex I).
4. The encouragement of state and local planning, the development and promulgation of information and training for Federal, State and local officials, and the provisions of guidance to state and local authorities on emergency response procedures and capabilities initiated under this Plan will be coordinated with and complementary to the Federal effort to provide emergency planning assistance to State and local governments in accordance with the January 17, 1973, Office of Emergency Preparedness Notice of Interagency Responsibilities on Fixed Facility Nuclear Incident Planning, published in Federal Register, Volume 38, No. 16, January 24, 1973.

Federal Statutes & Executive Orders Applicable To IRAP Signatory Agencies

Annex I

The following is a list of Federal Statutes and Executive orders which contain authorities and responsibilities applicable to emergency and disaster relief assistance to which radiological incident assistance is considered to be a part. The list will be revised periodically to add presently effective applicable Federal Statutes and Executive orders not listed below, to delete those that are no longer effective, and to include those established by new legislation.

1. The Atomic Energy Act of 1954, as amended, (42 USC 2011-2296)
2. The Disaster Relief Act of 1974, (PL 93-288)
3. The Civil Defense Act of 1950, as amended
4. The Explosives and Combustibles Act of 1948 (18 USC 831-835)
5. The Public Health Service Act (42 USC 241)
6. The Radiation Control for Health and Safety Act (PL 90-602) (Subpart 3 of 42 USC 241)
7. The Federal Water Pollution Control Act (33 USC 466) and Amendments of 1972 (33 USC 1151)
8. The Air Pollution Research and Technical Assistance Act (42 USC 1857)
9. The Federal Food, Drug and Cosmetic Act, as amended (21 USC 301 et seq.)
10. The Interstate Commerce Act, as amended
11. The National Security Act of 1947, as amended
12. The Clean Air Act of 1970, as amended (42 USC 1857-1857g)
13. The Agricultural Act of 1949, Section 407, as amended (7 USC 1427)
14. The Consolidated Farmers Home Administration Act of 1961 (see Public Law 87-128, Title III, August 8, 1971, section 321, Emergency Loans)
15. Executive Order No. 10014, November 3, 1948 (Cooperation in preventing pollution of surface and ground waters)
16. Executive Order No. 10173, October 18, 1950 (Safeguarding of U.S. vessels, harbors, ports and waterfront facilities), amended by E.O. No. 10352, May 19, 1952
17. Executive Order No. 10529, April 22, 1954 (State and local civil defense preemergency training programs)
18. Executive Order No. 10779, August 20, 1958 (Cooperation with state and local authorities in prevention of pollution of the atmosphere)
19. Executive Order No. 10952, July 20, 1961 (Assigns Civil Defense Responsibilities to the Secretary of Defense, Office of Emergency Planning, and others).
20. Executive Order No. 11051, September 27, 1962 (Prescribes responsibilities of the Office of Emergency Planning)
21. Executive Order No. 11490, "Assigns Emergency Preparedness Functions to Federal Departments and Agencies," October 28, 1969, as amended
22. Executive Order No. 11725, June 27, 1973 (Reassigns OEP National Emergency Preparedness Functions to DHUD, Treasury and GSA)
23. Executive Order No. 11795, May 22, 1974 (Delegates specific authorities and responsibilities in PL 93-288 to the Secretary, DHUD)
24. Reorganization Plan No. 1 of 1958
25. Reorganization Plan No. 3 of 1970 (Establishes the Environmental Protection Agency)
26. Reorganization Plan No. 1 of 1973
27. Codes of Federal Regulations
 - Title 10—Atomic Energy
 - Title 14—Coast Guard
 - Title 18—Crimes and Criminal Procedure
 - Title 19—Customs Duties
 - Title 21—Food and Drugs
 - Title 33—Navigation and Navigable Waters
 - Title 42—The Public Health and Welfare
 - Title 46—Shipping
 - Title 49—Transportation
 - Title 50—War and National Defense

IRAP Operations

Annex II

National Coordinating Offices

1. Issue such intra-agency instructions, directives, reports, bulletins or other documents as are necessary to implement IRAP policy, other applicable provisions of the Plan, policy interpretations, changes in the Plan, and projects as may be arrived at by the ICRA.
2. Establish guidelines, rules and operating procedures for their field office regional radiological assistance operations.
3. Carry out within the policy and provisions of the IRAP the management and administrative functions requisite to assuring that their agency's radiological assistance capabilities will be made available when needed.
4. Establish a system for reviewing their field office regional activities to assure continuity of their regional actions with those of the ERDA and other Federal agencies signatory to the IRAP.
5. Report to the ICRA on their agency's progress in implementing the IRAP and on other matters of interest to the Committee.

The ERDA National Coordinating Office

1. Coordinates the implementation of the Radiological Incident Response Training Guidelines, Annex III.
2. Coordinates the development of a system and procedures to obtain radiological incident information and reports from ERDA Regional Coordinating Offices, other Federal agencies and non-Federal sources.
3. Develops and promulgates a system for the coordination and dissemination of information on radiological assistance related matters to Federal, state and local organizations, private industry and the public.

Regional Coordinating Offices

1. Implement the policy and other provisions of the IRAP at the field organization level for the geographical area and/or operating functions assigned to them and in accordance with other instructions and requirements issued by their agency's headquarters.
2. Assure that personnel, facilities, equipment, services and other resources under their jurisdiction and designated by their agency's headquarters for use in radiological emergency operations will be available to the maximum extent practicable when needed for radiological assistance purposes.
3. Assure that their radiological assistance activities are complementary to and in accord with the provisions, procedures, and operating guidelines of ERDA Regional Interagency Radiological Assistance Plans as may be applicable to implementing their agency's responsibilities and commitments under the IRAP.
4. Develop and maintain procedures for the activation and/or dispatch of radiological assistance resources under their jurisdiction, and for the performance of radiological assistance operations as may be needed for the protection of health and safety following a radiological incident.

ERDA Regional Coordinating Offices

1. Request assistance from, distribute information to, and coordinate as necessary with Federal, State and local government agency offices to insure maximum implementation and continued success of this Plan. However, requests for assistance from the Department of Defense (DOD) military installations will be made through the ERDA-DOD Joint Nuclear Accident Coordinating Center (JNACC).

2. Receive requests for assistance from State and local government agencies, regional coordinating offices of signatory Federal agencies, and other organizations. However, DOD commands will normally make their requests through JNACC in accordance with established procedures except when local emergency conditions dictate the need for an immediate initial response.
3. Report radiological incidents of which they have knowledge to the ERDA National Coordinating Office. Incidents involving nuclear weapons shall also be reported to the JNACC in accordance with established procedures. Where appropriate, radiological incidents are also reported to signatory Federal agency regional coordinating offices and to State or local government agencies.
4. Maintain current information on the nature and location of signatory Federal agency radiological assistance capabilities, the procedures for obtaining their assistance; and in addition, the nature and location of such resources available from state and local agencies within their respective regions.
5. Maintain current listings of State and local government emergency coordinating offices within their regions and of signatory Federal agency regional coordinating offices established in accordance with the IRAP.

Emergency Action and Control

1. Immediate emergency action should be taken by authorities at the scene of an incident, within the limits of the available capability, to:
 - minimize the immediate hazard to health and safety;
 - request radiological incident assistance of the local, State or Federal organization most appropriate;
 - report the radiological incident to the appropriate local, State or ERDA Regional Coordinating Offices
2. Radiological assistance operations at the scene of the incident should be carried out as follows:
 - obtain all available information in regard to the identification and whereabouts of individuals who are or have been involved at the scene of the incident and others who may have observed the incident or events leading to the incident.
 - Assistance operations controlled by a Federal agency or local organization in accordance with the degree of authority available at the scene, will continue to be so controlled until controlling authority is transferred to transcendent authority where it exists.
 - Assistance operations associated with radioactive materials physically under the control of a Federal agency representative at the incident scene will be controlled by that agency until controlling authority is transferred to transcendent authority where it exists.
 - Assistance operations associated with nuclear weapons will be controlled in accordance with the provisions of ERDA-DOD agreements.
 - Assistance operations in support of action taken to cope with the effects of major disasters will be coordinated under the provisions of applicable Federal Statutes and Executive orders.
 - Assistance operations in support of nonmilitary radiological defense from enemy attack will be coordinated by the Defense Civil Preparedness Agency, as specified in applicable Federal Statutes and Executive orders.
 - Assistance operations initiated in support of the National Search and Rescue Plan will be conducted in accordance with the provisions of that plan and the U.S. Coast Guard "National Search and Rescue Manual."

Radiological Incident Response Training Guidelines

Annex III

Purpose

These Radiological Incident Response Training Guidelines are intended to encourage the development of training material and provide for access to sources of instruction appropriate for the personnel of Federal, State and local organizations who might be expected to respond in the interests of public health and safety to cope with hazards that might result from incidents involving radioactive materials.

Objectives

1. The training of appropriate persons to insure that:
 - immediate emergency actions at the scene of a radiological incident will be taken to minimize personal injury, loss of life, property damage and radiological hazards; and
 - action to inform the public and to assist in restoring normalcy will be taken as soon as possible after the incident.
2. The formulation and dissemination of criteria, information and procedures to be utilized in pre-incident planning and indoctrination aimed at:
 - preventing irresponsible action at the scene of a radiological incident; and
 - mitigating adverse psychological reactions of individuals and members of the public who may become concerned with a radiological incident.

Applicability

1. Personnel to be provided training include those:
 - likely to be at the scene of an incident when it occurs;
 - subject to being called for assistance in the immediate vicinity of an incident; and
 - local authorities who need to cooperate in obtaining emergency assistance (either locally or from organized radiological assistance capabilities).
2. Training material should be developed for:
 - a short course designed for persons who would not be expected to come in contact with radiological problems in their normal activities; and

- a moderate length course designed for persons occupied in work concerned with health and safety who might have opportunity for contact with radiological problems.

Policy

These Radiological Incident Response Training Guidelines must be implemented as fully as practicable, and be integrated into the existing training activities of the IRAP signatory Federal agencies; and whenever feasible, into the training activities of state and local groups also. This training should not be considered to require the formulation of special training organizations.

Implementing Procedures for IRAP Agencies

1. The Interagency Committee on Radiological Assistance (ICRA) will form a Training Coordination Subcommittee (TCS) consisting of not more than one representative of each signatory agency which shall have responsibility for assuring that existing training is made available to all appropriate communities and that duplication is prevented where more than one training capability exists.
2. Each IRAP signatory agency will provide upon request by the ERDA National Coordinating Office such assistance in the training of Federal, State and local personnel and in the dissemination of information as is available through its normal operating responsibilities and capabilities.
3. Each signatory agency will provide, as is feasible, information regarding its training activities upon request by the ERDA National Coordinating Office.
4. The ERDA National Coordinating Office with the advice and assistance of the TCS will apprise appropriate IRAP signatory agencies of the magnitude and importance of radiological incident response training needs and request them to assume specific responsibilities, subject to commitments of higher priority, for implementation of such training activities as are within the scope of their respective competencies.

Federal Agencies Signatory to the Interagency Radiological Assistance Plan

Annex IV

In accordance with Section 9 of the IRAP the following 13 Federal agencies are signatory to the Plan:

- Defense Civil Preparedness Agency
- Department of Agriculture
- Department of Commerce
- Department of Defense
- Department of Health, Education and Welfare
- Department of Labor
- Department of Transportation
- Energy Research and Development Administration
- Environmental Protection Agency
- Interstate Commerce Commission
- National Aeronautics and Space Administration
- Nuclear Regulatory Commission
- Postal Service

Signatory Agency Functions & Capabilities Supporting Radiological Emergency Response Operations

Annex V

This annex is a compilation of statements from the Federal departments and agencies signatory to this Plan. Some of these statements include lists of officials identified as appropriate points of contact for coordination with ERDA Regional Coordinating Offices for implementation of this Plan. All statements are intended to describe the functions and capabilities that the agency will contribute to an ERDA-coordinated Federal response to a radiological incident. ERDA regional radiological assistance plans include the activation of an Interagency Coordinating Staff of Federal agency field office officials from those agencies whose legal

authorities, responsibilities and jurisdictions may be needed to cope with the consequences of a particular radiological incident.

The Federal agency officials responding to such requests for their assistance will provide that support which is defined by the statement by their department or agency contained in this annex. Where an agency has additional expertise or resources that could be made available to assist in the event of a radiological incident, such information has been previously supplied, or may be supplied to the ERDA as requested.

DEFENSE CIVIL PREPAREDNESS AGENCY

The mission of the Defense Civil Preparedness Agency (DCPA) is to (1) discharge and perform the civil defense functions delegated to the Secretary of Defense pursuant to Section 1, Executive Order 10951; (2) discharge and perform the disaster warning function delegated to the Secretary of Defense pursuant to Section 1(c), Executive Order 11575; and (3) provide natural disaster preparedness planning assistance to State and local governments. Responsibility for civil defense is vested jointly in the Federal Government and the several states and their political subdivisions. All civil defense resources at Federal, State or local level may be used to prevent loss of life or injury and minimize damage to property.

The DCPA consists of a National Office located in Washington, D.C.; eight regional and two field offices located in Maynard, Massachusetts; New York, New York; Olney, Maryland; Thomasville, Georgia; Battle Creek, Michigan; Denton, Texas; Denver, Colorado; Kansas City, Missouri; Santa Rosa, California; and Bothell, Washington; and a Staff College located in Battle Creek, Michigan. A Radiological Instrumentation Test Facility is operated for DCPA at the Washington Navy Yard. The Defense Supply Agency operates one Federal radiological equipment depot for DCPA; this depot is a supply and maintenance facility for DCPA controlled radiological instruments, repair parts and calibration equipment.

Each state has a statewide civil defense or civil emergency preparedness organization that is responsible to the governor of that state. Each county and/or large city within the state has a civil preparedness organization. DCPA has established an extensive communications system between its offices and Federal, State and local governmental units. The National Warning Systems include voice communications with approximately 350

Federal installations and 900 state and local facilities. The civil defense teletype and voice landline communications systems provide for 24-hour communications with all DCPA locations and state civil preparedness offices; radio backup is also provided with reduced message capacity. Access to these communications systems are available at state and local emergency operating centers.

DCPA has purchased and granted to the states large quantities of radiological survey meters and dosimeters. These instruments were primarily designed to detect and measure gamma radiation from nuclear fallout; however, many of these instruments have application in a peacetime emergency, especially one involving high radiation levels. Instruments have been assembled into operational monitoring sets and shelter monitoring kits. Sixty-three thousand operational monitoring sets and 138,000 shelter monitoring kits have been distributed throughout the United States. They contain the following types of instruments: CD V-700 radiological survey meter, geiger counter probe type, beta/gamma discriminating, 0-0.5, 0-5, and 0-50 mR/hr; CD V-715 radiological survey meters, gamma only, 0-0.5, 0-5, 0-50, and 0-500 R/hr; CD V-742 radiological dosimeters, self-reading, gamma only, 0-200 R; CD V-750 radiological dosimeter charger; and CD V-717 radiological survey meter, remote-reading, gamma only, 0-0.5, 0-5, 0-50, and 0-500 R/hr. In addition, nearly two million CD V-742 dosimeters, ninety thousand CD V-750 chargers and twelve hundred CD V-781 aerial survey meters, gamma only, 0-0.1, 0-1, and 0-10 R/hr have been furnished to the states. These instruments are routinely maintained and recalibrated by DCPA through state operated Maintenance and Calibration Facilities.

DEPARTMENT OF AGRICULTURE

The functions and capabilities of the U.S. Department of Agriculture (USDA) to provide radiological assistance in event of a major nuclear accident are very limited. In accordance with a Memorandum of Understanding between the U.S. Department of Agriculture and the Defense Civil Preparedness Agency of the Department of Defense, the USDA maintains a restricted radiological monitoring capability for its own use. This means that USDA will have no monitoring capability to contribute to an integrated Federal radiological assistance program.

The Department is prepared, however, to assist in the following areas when necessary:

1. Expand family feeding programs, including food stamps, and donate food when available.
2. Assist in providing livestock feed.
3. Estimate the extent of radiation damage to agricultural resources from monitoring data supplied by DCPA.
4. Provide loans and cost share financing to assist farmers and other rural residents in rehabilitation efforts.
5. Provide other assistance by adapting regular USDA programs as necessary.

DEPARTMENT OF COMMERCE

The following statement describes the functions and capabilities that the Department of Commerce (DOC) will contribute to a coordinated Federal agency response to a radiological incident.

1. Under the DOC National Oceanic and Atmospheric Administration (NOAA), the National Weather Service (NWS) field offices at cities throughout the United States will:
 - provide current information and weather forecast and warning advisory services to assist in meeting radiological emergencies, especially information about changes in wind, boundary layer mixing, and precipitation conditions and other significant weather parameters;
 - provide fallout wind vector data when requested to do so;
 - utilize DCPA equipment at local NWS field offices to provide gamma radiation level readings, if requested by appropriate agencies; and
 - provide weather and climate information and advice for use in planning protective action or relief programs. NWS Regional Offices provide coordination and planning assistance.
2. The NOAA Air Resources Laboratories undertake research in atmospheric boundary layer transport and diffusion problems and have experts who could be called on as consultants when a radiological incident occurs.
3. The Maritime Administration (MARAD) has emergency response capabilities which are available at the National Defense Reserve Fleet sites located at James River, Virginia; Beaumont, Texas; and Suisan Bay, California.
 - When any of these are affected, MARAD will furnish appropriate assistance and advice. Marine equipment such as tugs, power barges, cranes, and cranes, and radiological survey instruments can be utilized on the basis of noninterference with MARAD's primary mission.

DEPARTMENT OF DEFENSE

The following statement describes the functions and capabilities the Department of Defense (DOD) will contribute to a coordinated Federal agency response to a radiological incident:

1. The Department of Defense responsibilities, relative to radiological assistance in the event of an accident involving radioactive material, are as identified in DOD Instruction 5100.52, dated 11 January 1967. The Joint Department of Defense and Atomic Energy Commission agreement in response to accidents involving radioactive material, dated 9 May 1966, which is a part of this instruction, provides for efficient transfer of control responsibility from the first man to arrive at the scene to the agency having primary command responsibility. Primary command responsibility normally rests with the service or agency having physical possession of the nuclear material at the time of the accident. One exception is that the Army has primary command responsibility for control of accidents of such scope as to constitute a domestic emergency.
2. The individual accident response capabilities which exist within each of the services and ERDA are reported to the Joint Nuclear Accident Coordinating Center (jointly staffed by DOD and ERDA personnel) at Albuquerque, New Mexico. This material forms the data base for a computerized program which can provide equipment and/or personnel availability information by location relative to the accident site. Capability for specific equipment search plus a number of other functions are also available. The JNACC publishes and distributes (annually) a listing of nuclear accident response capability for DOD and ERDA organizations world-wide. While JNACC exercises no command or control functions, it does serve as a centralized function for exchanging and maintaining information concerned with radiological assistance capabilities and will coordinate such assistance when requested.
3. While JNACC serves as a central contact for information, the equipment and personnel assets are contained within each of the Services and ERDA. (ERDA response capabilities are not addressed.) The separate service response capabilities are organized as follows:

- **Army**

The overall responsibility for Army response to nuclear accidents is assigned to the U.S. Army Forces Command (FORSCOM). FORSCOM has further delegated this responsibility to the three Army area commanders, 1st, 5th, and 6th Armies,

and has established seven primary nuclear emergency teams, each having two nuclear qualified Explosive Ordinance Disposal (EOD) teams. The area commanders have designated general officers to serve as on-scene commanders and each installation has a lieutenant colonel or above assigned as a nuclear accident and incident control officer. The nuclear capable teams are designed to aid and protect personnel and equipment and to protect U.S. Government interests at the scene of a nuclear incident.

In addition to these forces, the Army has one radiation control team located at Edgewood Arsenal, Maryland, and three radiological emergency teams located at Army hospitals in San Francisco, San Antonio, and Washington, D.C.

- **Navy**

Naval response within the U.S. is controlled by a disaster control office within each of the Naval districts. An admiral is designated to command response forces at the scene. The Navy has EOD and radiation monitoring teams located at Naval bases throughout the U.S. which respond to incidents involving Navy weapons. In addition, each Navy ship has its own teams which are tailored to the nuclear materials it is capable of carrying. One radiation control team is located at the Naval Ordnance Laboratory, White Oak, Maryland.

- **Air Force**

The Air Force has established a Major Accident Response Team (MART) at HQ USAF to provide support and assistance to the major commands. Each major command and operating agency has established a Headquarters Disaster Response Force (HQDRF) capable of responding to radiological accidents. Local Disaster Response Forces with varying capabilities are established at each base. In addition the Air Force Logistics Command provides the services of the USAF Radiological Health Lab, Wright Patterson AFB, Ohio. It also maintains Air Transportable Radiac Instrumentation Packages (ATRAPs) in alert status for special response.

4. Initial accident response is by the installation closest to the scene. The major command having physical possession of the material involved is responsible for dispatching their Disaster Response Forces to assume command and control at the scene of the accident/serious incident. The service/organization requesting assistance is responsible for reimbursing other services/organizations for expenditures made in response to a request for assistance.

DEPARTMENT OF HEALTH, EDUCATION & WELFARE

Authorities

1. PUBLIC HEALTH SERVICE (PHS)

The Public Health Service Act, as amended, (42 USC 241) authorizes cooperation with and assistance to other appropriate public authorities in the prevention of disease and other impairments of man. Provides specifically for assistance to states and their political subdivisions in the suppression of communicable disease and cooperation with state and local authorities in the enforcement of their health regulations and for advice to states on matters relating to the preservation and improvement of the public health. Upon the request of state or local authority, may extend temporary assistance to states or localities in meeting health emergencies of such a nature as to warrant Federal assistance. Provides for the establishment and operation of the Public Health Service Hospitals. Provides authorities to assure the purity and safety of biological products.

2. FOOD AND DRUG ADMINISTRATION (FDA), PUBLIC HEALTH SERVICE

FDA's specific role and responsibilities are included in laws which have been assigned to FDA for administration. Laws pertinent to IRAP operations are as follows:

- Federal Food, Drug, and Cosmetic Act, as amended (21 USC 301 et seq.)
- The Radiation Control for Health and Safety Act (PL 90-602), (Subpart 3 of 42 USC 241). *

FDA activities are to protect the health of the nation as it may be impaired by foods (including animal feeds), drugs, biological products, cosmetics, medical devices, ionizing and non-ionizing radiation-emitting products and substances; poisons, pesticides, and food additives.

As related to IRAP, FDA functions are geared to ensure that foods and animal feeds are safe, pure, and wholesome; drugs medical devices, and biological products are safe and effective, cosmetics are harmless; and that exposure to potentially injurious radiation is minimized.

* The Food and Drug Administration also utilizes general provisions of the Public Health Service Act as they are applicable to its programmatic responsibilities.

Physical Facilities

1. HEADQUARTERS

• Public Health Service

The PHS Emergency Coordination Office and the PHS Emergency Operating Center (EOC) are located within the Office of the Assistant Secretary for Health. This office is responsible for coordinating emergency response activities in the event of major disaster or other catastrophe. The PHS-EOC has a remote station of the DHEW Emergency Radio Network, an amateur radio station, and access to the National Warning System (NAWAS).

• Bureau of Radiological Health (BRH)

The BRH is responsible for radiological health activities conducted in FDA and provides the major source of radiation expertise within PHS and the Department. It is responsible for technical guidance and back-up field activities conducted through the Executive Director for Regional Operations (EDRO), FDA. It is the location of one of the six radiological assistance teams available under a joint Radiological Assistance Plan cosigned by the Office of Radiation Programs, Environmental Protection Agency (ORP, EPA); BRH, FDA, and EDRO, FDA. Services of the Radiological Assistance Team may be obtained by contacting the Regional Radiological Health Representative, the EPA Regional Radiation Representative, or the Bureau of Radiological Health Headquarters.

2. DHEW REGIONAL OFFICES

Consultation and advice on public health problems generally may be obtained through the Regional Health Administrators. A member of his staff is designated as Regional Disaster Assistant Coordinator. The Regional Food and Drug Director is responsible for overall FDA operations and personnel within the Regions and should be contacted for assistance related to foods, drugs, and biological products generally. The Regional Radiological Health Representatives on the staff of the FDA Regional Directors have expertise in radiation protection and should be contacted directly for obtaining services of a radiological assistance team or for consultation and advice on radiation problems.

FDA has ten (10) regional offices with the following capabilities for response to a radiological emergency:

- 590, CD V—700 Geiger Counters
- 87, CD V—710 Ion Chambers
- 743, CD V—715 Ion Chambers
- 272, CD V—720 Ion Chambers
- 180, CD V—730 Dosimeters
- 180, CD V—740 Dosimeters
- 831, CD V—742 Dosimeters
- 620, CD V—750 Dosimeters Chargers

Designated FDA personnel are trained to utilize the above-described instruments in the event of a radionuclide contamination of food and drugs and other products which come within the jurisdiction of FDA.

3. WINCHESTER ENGINEERING AND ANALYTICAL CENTERS

This FDA facility is the location of one of six Radiological Assistance Teams available under the joint FDA-ORP, EPA Radiological Assistance Plan. The Center also has the capability for complete analysis of foods, drugs, and other environmental samples for radioactivity content. The assistance of the Radiological Assistance Team or of the laboratory may be obtained by contacting the FDA Regional Radiological Health Representative, the EPA Regional Radiation Representative, or the Laboratory Director.

4. PUBLIC HEALTH SERVICE HOSPITALS

The PHS Hospitals listed in the Directory are general hospitals providing medical care to designated beneficiaries as authorized by law. The hospitals have no special facilities for the care of patients contaminated with radioactivity, but do have radiology department and nuclear medicine facilities. They are available to assist in emergencies as provided by law. The Director of the Hospital should be contacted for assistance.

Directory of Personnel and Facilities

1. HEADQUARTERS

- **Public Health Service Emergency Coordinator's Office**

Room 4-81, Parklawn Building
5600 Fishers Lane
Rockville, Maryland 20852
Telephone 301-443-1167
Coordinator—A. James Thomas
Home Telephone—301-762-0399

Health Resources Planning Officer—
Paul K. Kaetzel
Home Telephone—301-262-1432

- **Food and Drug Administration**

Mr. Sam D. Fine
Associate Commissioner for Compliance
Room 14-63, Parklawn Building
5600 Fishers Lane
Rockville, Maryland 20852
Telephone—301-443-1594
Home Telephone—703-978-9749

Mr. Joseph P. Hile
Executive Director of Regional Operations
Room 13-65, Parklawn Building
5600 Fishers Lane
Rockville, Maryland 20852
Telephone—301-443-6230
Home Telephone—703-968-7098

- **Bureau of Radiological Health Headquarters, FDA**

12720 Twinbrook Parkway
Rockville, Maryland 20852
Telephone—301-443-6220
Contact Officers:
Ernest C. Anderson
Assistant Director for Special Projects
Home Telephone—301-946-3224
Caleb Kincaid, Team Captain
Home Telephone—301-762-3488
Gail Schmidt, Alternate Team Captain
Home Telephone—301-424-3151

2. DHEW REGIONAL OFFICES

- **Region 1**

(Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, and Vermont)

Regional Disaster Assistance Coordinator
Mark Lurvey—*Telephone 617-223-6648*
Home Telephone—617-486-4703

Regional Health Administrator
Gertrude Hunter, M.D., Acting
John F. Kennedy Federal Building
Boston, Massachusetts 02203
Telephone—617-223-6827

Regional Food and Drug Director
A. J. Beebe—*Telephone 617-223-4425*
585 Commercial Street
Boston, Massachusetts 02109

Regional Radiological Health Representative
Robert M. Hallisey
Telephone—617-223-5859 or 3179
Home Telephone—617-729-5728

- **Region II**

(New Jersey, New York, Puerto Rico, Virgin Islands)

Regional Disaster Assistance Coordinator
John J. McDermott
Telephone—212-264-4602
Home Telephone—212-321-1558

Regional Health Administrator
Jaime Rivera-Dueno, M.D., Acting
26 Federal Plaza, Room 1005
New York, New York 10007
Telephone—212-264-2560

Regional Food and Drug Director
C. G. Shane
850 3rd Avenue
Brooklyn, New York 11232
Telephone—212-788-5000, Ext. 300

Regional Radiological Health Representative
Ronald E. Bernacki
Telephone 212-788-5000
Home Telephone—516-261-2440

- **Region III**

(Delaware, District of Columbia, Maryland, Pennsylvania, Virginia, West Virginia)

Regional Disaster Assistance Coordinator
O. Eugene Trivits
Telephone—215-597-6708
Home Telephone—302-731-5074

Regional Health Administrator
George C. Gardiner, M.D., Acting
Post Office Box 13716
Philadelphia, Pennsylvania 19101
Telephone—215-597-6637

Regional Food and Drug Director
T. C. Maraviglia
2nd and Chestnut Streets, Room 1204
Philadelphia, Pennsylvania 19106
Telephone—215-597-4390

Regional Radiological Health Representative
Robert Frankel
Telephone—215-597-4506
Home Telephone—609-424-4216

- **Region IV**

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina, Tennessee)

Regional Disaster Assistance Coordinator
Michael C. Herman
Telephone—404-526-5478
Home Telephone—404-284-5651

Regional Health Administrator
George A. Reich, M.D.
50 Seventh Street, NE.
Atlanta, Georgia 30323
Telephone—404-526-5007

Regional Food and Drug Director
M. D. Kinslow
800 W. Peachtree Street, NW.
Atlanta, Georgia 30309
Telephone—404-526-5265

Regional Radiological Health Representative
Joseph A. Brennan, Jr.
Telephone—404-526-3576
Home Telephone—404-427-9884

- **Region V**

(Illinois, Indiana, Michigan, Minnesota, Ohio, Wisconsin)

Regional Disaster Assistance Coordinator
Milton C. Schultz
Telephone—312-353-5255
Home Telephone—312-495-2062

Regional Health Administrator
Frank Ellis, M.D., Acting
300 S. Wacker Drive
Chicago, Illinois 60606
Telephone—312-353-1385

Regional Food and Drug Director
D. C. Heaton
433 West Van Buren Street, Room 1222
Chicago, Illinois 60607
Telephone—312-353-1046

Regional Radiological Health Representative
James A. Kraeger
Telephone—312-353-5244
Home Telephone—312-359-7387

- **Region VI**

(Arkansas, Louisiana, New Mexico, Oklahoma, Texas)

Regional Disaster Assistance Coordinator
Harvey L. Bradshaw
Telephone—214-749-2891

Regional Health Administrator
Floyd A. Norman, M.D.
1114 Commerce Street
Dallas, Texas 75202
Telephone—214-749-1271

Regional Food and Drug Director
P. B. White
3032 Bryan Street
Dallas, Texas 75204
Telephone—214-749-2735

Regional Radiological Health Representative
James A. McTaggart, D.D.S.
Telephone—214-749-2225
Home Telephone—214-235-2283

● **Region VII**

(Iowa, Kansas, Missouri, Nebraska)

Regional Disaster Assistance Coordinator
Robert McManus
Telephone—816-374-3436

Regional Health Administrator
Wherritt Holman, M.D.
601 East 12th Street
Kansas City, Missouri 64106
Telephone—816-374-3291

Regional Food and Drug Director
L. E. Claiborne
1009 Cherry Street
Kansas City, Missouri 64106
Telephone—816-374-5521

Regional Radiological Health Representative
William H. Oates, Jr.
Telephone—816-374-3817
Home Telephone—913-782-4850

● **Region VIII** (Colorado, Montana, North Dakota,
South Dakota, Utah, Wyoming)

Regional Disaster Assistance Coordinator
Robert F. Heggie
Telephone—303-837-4466
Home Telephone—303-794-3434

Regional Health Administrator
H. Connor Hilary, M.D., Acting
19th and Stout Streets
Denver, Colorado 80202
Telephone—303-837-4461

Regional Food and Drug Director
F. L. Lofsvold
721 19th Street
Denver, Colorado 80202
Telephone—303-837-4915

Regional Radiological Health Representative
Bobby L. Dillard
Telephone—303-837-4917
Home Telephone—303-759-9816

● **Region IX**

(Arizona, California, Hawaii, Nevada, Guam, American
Samoa)

Regional Disaster Assistance Coordinator
Harold R. Coleman
Telephone—415-556-8582
Home Telephone—415-345-8423

Regional Health Administrator
Sheridan L. Weinstein, M.D.
50 Fulton Street
San Francisco, California 94102
Telephone—415-556-5810

Regional Food and Drug Director
I. B. Berch
50 Fulton Street, Room 518
San Francisco, California 94102
Telephone—415-556-2062

Regional Radiological Health Representative
Morgan S. Seal
Telephone—415-556-2211
Home Telephone—415-924-5233

● **Region X**

(Alaska, Idaho, Oregon, Washington)

Regional Disaster Assistance Coordinator
John I. Nelson
Telephone—206-442-0496

Regional Health Administrator
David W. Johnson, M.D.
1321 Second Avenue
Seattle, Washington 98101
Telephone—206-442-0430

Regional Food and Drug Director
J. L. Swanson
909 1st Avenue, Room 5003
Seattle, Washington 98104
Telephone—206-442-5304

Regional Radiological Health Representative
David H. Flora
Telephone—206-442-5740
Home Telephone—206-392-1678

**3. WINCHESTER ENGINEERING AND
ANALYTICAL CENTER**

109 Holton Street
Winchester, Massachusetts 01890
John M. Taylor, Director
Telephone—617-729-5700
Neil A. Gaeta, Team Captain
Telephone—617-729-5700
Home Telephone—617-488-7081

4. PUBLIC HEALTH SERVICE HOSPITALS

USPHS Hospital
Director, Kark F. Urbach, M.D.
15th Avenue and Lake Street
San Francisco, California 94118
Telephone—415-752-1000

USPHS Hospital
Director, J. J. Noya, M.D.
210 State Street
New Orleans, Louisiana 70118
Telephone—504-899-3441

USPHS Hospital
Director, K. K. Wong, M.D., Acting
3100 Wyman Park Drive
Baltimore, Maryland 21211
Telephone—301-338-1100

USPHS Hospital
Director, Milo Blade, M.D.
77 Warren Street
Boston, Massachusetts 02135
Telephone—617-782-3401

USPHS Hospital
Director, Nicholas J. Galluzzi, M.D.
Bay and Vanderbilt Streets
Staten Island, New York 10304
Telephone—212-447-3010

USPHS Hospital
Director, Thomas Shinnick, M.D.
4400 Avenue N
Galveston, Texas 77550
Telephone—713-763-1158

USPHS Hospital
Director, Frank W. Nelson, D.D.S.
6500 Hampton Boulevard
Norfolk, Virginia 23508
Telephone—804-423-5800

USPHS Hospital
Director, Charles M. Bowyer, M.D.
1131 4th Avenue South
Seattle, Washington 98114
Telephone—206-325-8000

DEPARTMENT OF LABOR

The following statement describes the U.S. Department of Labor (DOL) support of a coordinated Federal agency response to a radiological incident:

Pursuant to the authority provided by the Occupational Safety and Health Act of 1970, the Secretary of Labor has been provided authority to establish and enforce Federal occupational safety and health standards for most of the Nation's workplaces. These activities are being handled by the Occupational Safety and Health Administration (OSHA) within the Department of Labor.

In response to IRAP, the Department of Labor can, through OSHA, provide the kinds of assistance indicated

below. Specific details for this response are presently being determined.

- Radiological monitoring instrumentation;
- Personnel with radiological experience;
- Personnel with nonradiological occupational safety and health experience; and
- Personnel for supporting functions.

OSHA Regional Offices are being advised of their role in IRAP and will assist the AEC Regional Offices with the Regional IRAP planning activities. A U.S. Department of Labor Regional Office cities map with OSHA telephone numbers for technical assistance may be found on following page.

DEPARTMENT OF TRANSPORTATION

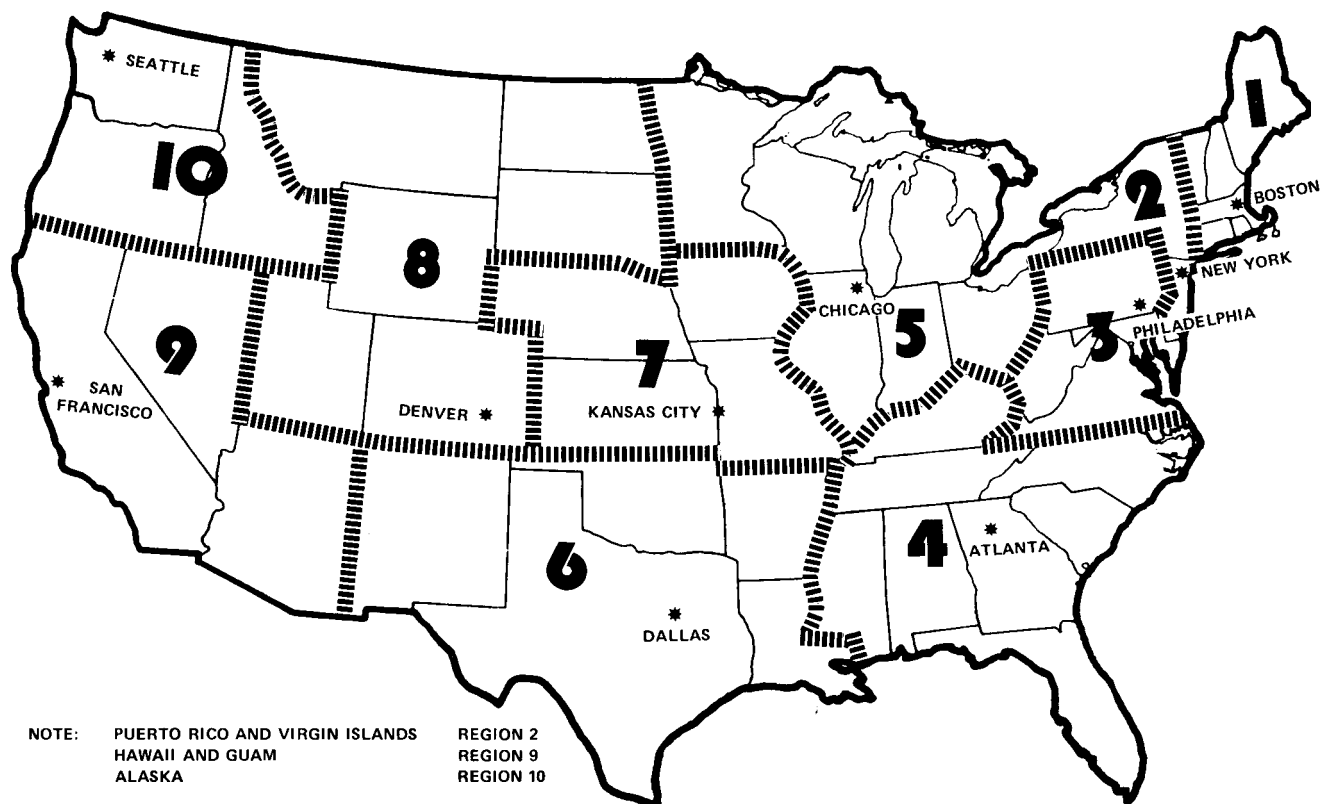
The following statement describes the functions and capabilities of the Department of Transportation (DOT) that would contribute to a coordinated Federal response to a radiological incident:

Department of Transportation participation in response to radiological incidents will be primarily limited to notification of Federal and local agencies, arrangement

of special transportation activities and assistance in contacting consignors and consignees of shipments involved in the incident. Some very limited radiological monitoring capabilities may, in some cases, be provided by local DOT agencies.

The list of DOT regional Hazardous Materials Specialists/Coordinators follows on page 18.

U.S. Department Of Labor Regions & Regional Office Cities



OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION

REGION

1	Boston, Mass.	617	223-6712
2	New York, N.Y.	212	971-5921
3	Philadelphia, Pa.	215	597-1201
4	Atlanta, Ga.	404	526-3573
5	Chicago, Ill.	312	353-4716

REGION

6	Dallas, Tex.	214	749-2477
7	Kansas City, Mo.	816	374-5249
8	Denver, Colo.	303	837-3883
9	San Francisco, Calif.	415	556-1634
10	Seattle, Wash.	202	442-5930

DOT REGIONAL HAZARDOUS MATERIALS SPECIALISTS/COORDINATORS

FAA—Regional Hazardous Materials Coordinators
FHWA (BMCS)—Regional Hazardous Materials Specialists
FRA—Regional Hazardous Materials Specialists/
Coordinators
USCG—Captains of the Port

Regional Emergency Transportation Coordinators
Regional Emergency Transportation Representatives
Secretarial Representatives

Federal Aviation Administration (FAA)

REGIONAL HAZARDOUS MATERIALS COORDINATORS

Alaskan Region

Anchorage, Alaska
Mr. Edward Allen
(907) 265-4252

Rocky Mountain Region

Denver, Colorado
Mr. Andrew O. Davis
(303) 837-4459

Great Lakes Region

Chicago, Illinois
Mr. John Freese
(312) 694-3348

New England Region

Boston, Massachusetts
Mr. George L. Howard
(617) 223-6416

Eastern Region

New York, New York
Mr. Edward J. Carr
(212) 995-8691

Western Region

Los Angeles, California
Mr. Leon J. Janky
(213) 536-6210

Northwest Region

Seattle, Washington
Mr. Gale F. Hanson
(206) 767-2760

Central Region

Kansas City, Missouri
Mr. Dewey E. Ballard
(816) 374-3526

Southern Region

Atlanta, Georgia
Mr. Sherwood B. Allen
(404) 526-7421

Southwest Region

Ft. Worth, Texas
Mr. Lucien E. Stone
(817) 283-6278

Federal Highway Administration Bureau Of Motor Carrier Safety (FHWA BMCS)

REGIONAL HAZARDOUS MATERIALS SPECIALISTS

Region I

(Connecticut, Maine, Massachusetts, New Hampshire, New Jersey, New York, Rhode Island, and Vermont)

Raymond Valentine
4 Normanskill Boulevard
Delmar, New York 12054
518-472-7866

Region III

(Delaware, Maryland, Pennsylvania, Virginia, and West Virginia)

William C. Savage
Room 816-A, Federal Building
31 Hopkins Plaza
Baltimore, Maryland 21201
301-962-4572

Region IV

(Alabama, Georgia, Florida, Mississippi, North Carolina, South Carolina, Tennessee, and Kentucky)

William L. Barrow, Jr.
Suite 200, 1720 Peachtree Road, NW.
Atlanta, Georgia 30309
404-526-5049

Region V

(Illinois, Indiana, Ohio, Michigan, Wisconsin, and Minnesota)

Gene H. Albers
18209 South Dixie Highway
Homewood, Illinois 60430
312-799-6300 x65

Region VI

(Arkansas, Louisiana, Oklahoma, Texas, and New Mexico)

J. D. Friesen
819 Taylor Street
Fort Worth, Texas 76102
817-334-3225

Region VII

(Iowa, Kansas, Missouri, and Nebraska)

William A. Crowder
P.O. Box 7186
Country Club Station
Kansas City, Missouri 64113
816-361-0860 x7095

Region VIII

(Colorado, Utah, Wyoming, Montana, North Dakota, and South Dakota)

Ralph D. Graham
Room 151, Building 40
Denver Federal Center
Denver, Colorado 80225
303-234-3131 x2339

Region IX

(Arizona, California, Nevada, and Hawaii)

Eugene A. Graham
450 Golden Gate Avenue
Box 36096
San Francisco, California 94102
415-556-3553

Region X

(Alaska, Idaho, Oregon, and Washington)

Judge R. Shelton
Room 412, Mohawk Building
222 SW. Morrison Street
Portland, Oregon 97204
503-221-2093

Federal Railroad Administration (FRA)**REGIONAL HAZARDOUS MATERIALS SPECIALISTS/COORDINATORS**

C. R. Meyrick*
E-309 JFK Federal Building
Government Center
Boston, Massachusetts 02203
(617) 223-2775

J. C. Buckingham
1031 Federal Building
970 Broad Street
Newark, New Jersey 07102
(201) 645-3069

R. A. Johnson*
Mezzanine Floor
Gateway Building
3535 Market Street
Philadelphia, Pennsylvania 19104
(215) 597-1075

J. F. McLellen*
622 FAA Building
3400 Whipple Street
East Point, Georgia 30320
(404) 526-7381

E. W. Timmons
622 FAA Building
3400 Whipple Street
East Point, Georgia 30320
(404) 526-7381

G. R. McConnell *
536 S. Clark Street
Room 210
Chicago, Illinois 60605
(312) 353-6203

E. W. Pritchard
536 S. Clark Street
Room 210
Chicago, Illinois 60605
(312) 353-6203

D. R. Holmes *
Federal Building Room 11A23
819 Taylor Street
Fort Worth, Texas 76102
(817) 334-3601

R. J. Harrison
Federal Building Room 225
2320 LaBranch Street
Houston, Texas 77004
(713) 226-4996

E. H. Anderson *
Room 450
319 South West Pine Street
Portland, Oregon 97204
(503) 221-3011

W. B. Ingham
Federal Office Building Room 6048
909 First Avenue
Seattle, Washington 98104
(206) 422-4633

A. L. Hynes *
Room 7423
450 Golden Gate Avenue
P.O. Box 36108
San Francisco, California 94102
(415) 556-6632

C. E. Bowles
Room 7423
450 Golden Gate Avenue
P.O. Box 36108
San Francisco, California 94102
(415) 556-6632

W. F. Callicotte *
Federal Building Room 284
601 East 12th Street
Kansas City, Missouri 64106
(816) 374-2497

W. A. Barwick
U.S. Court & Custom House
Room 647
1114 Market Street
St. Louis, Missouri 63101
(314) 622-4101

* Regional Director

U.S. Coast Guard (USCG)

CAPTAIN-OF-THE-PORT (COTP) TELEPHONE DIRECTORY

DISTRICT/COTP	FTS NUMBER	DISTRICT/COTP	FTS NUMBER
CCGDONE (mps)	617-223-6915	TAMPA	813-228-7140
BOSTON	617-223-6973	CCGDEIGHT (mps)	504-527-6271
PROVIDENCE	401-528-4338	NEW ORLEANS	504-527-7113
PORTLAND	207-775-3275	CORPUS CHRISTI	512-883-5246
CCGDTWO (mps)	314-622-4657	PORT ISABEL	512-546-2247
ST. LOUIS	314-622-4657	SABINE	80-713-971-2361
PADUCAH	502-443-7361	HOUSTON	713-226-4804
CINCINNATI	513-684-3295	GALVESTON	713-763-1671
DUBUQUE	319-582-7225	MOBILE	205-433-3234
HUNTINGTON	304-529-2524	CCGDNINE (mps)	216-522-3918
LOUISVILLE	502-582-5194	SAULT ST. MARIE	313-226-6000
MEMPHIS	901-534-3941	BUFFALO	716-842-2706
NASHVILLE	615-749-5421	CHICAGO	312-353-1226
PITTSBURGH	412-644-5808	CLEVELAND	216-522-4404
CCGDTHREE (mep)	212-264-8723	DETROIT	313-226-6860
NEW YORK	212-264-8750	DULUTH	218-727-6286
ALBANY	518-472-6110	MILWAUKEE	414-224-3162
NEW LONDON	203-449-7244	MUSKEGON	616-722-1752
PHILADELPHIA	609-963-2232	TOLEDO	419-259-6373
NEW HAVEN	203-772-6445	CCGDELEVEN (mps)	213-590-2301
CCGDFIVE (mps)	804-393-9315	LA/LB	213-590-2321
BALTIMORE	301-789-6415	SAN DIEGO	714-295-3121
HAMPTON ROADS	804-393-9205	CCGDTWELVE (mps)	415-556-0715
WILMINGTON, N.C.	919-763-9436	HUMBOLDT BAY	707-443-2211
CCGDSEVEN (mps)	305-350-5276	MONTEREY	408-375-2278
JACKSONVILLE	904-791-2648	SAN FRANCISCO	415-556-3740
SAVANNAH	912-232-4353	CCGDTHIRTEEN (mps)	206-624-2902
CHARLESTON	803-577-4171		x343 or x358
KEY WEST	80-305-296-2525	PORTLAND, OREGON	503-221-2994
MIAMI	80-305-672-2021	SEATTLE	206-442-2361
SAN JUAN	AUTOVON 434-1710		
	ASK FOR 725-0857		
	ASK FOR COGARD 55		

DISTRICT/COTP	FTS NUMBER	DISTRICT/COTP	FTS NUMBER
CGDFOURTEEN (mps)	415-556-0220 ASK FOR 808-546-5564	ANCHORAGE	317-754-7137 (AUTOVON)
HONOLULU	415-556-0220 ASK FOR 808-533-1215	JUNEAU	317-388-1121 (AUTOVON)
GUAM	415-556-0220 ASK FOR 322-2109	KETCHIKAN	907-225-2297 AUTOVON
CCGDSEVENTEEN (mps)	SEE JUNEAU FOR AUTOVAON NO.		

Regional Emergency Transportation Coordinators & Representatives

OP/DOT Region	Regional Emergency Transportation Coordinator	Regional Emergency Transportation Representative
1 & 2	RADM Helmer S. Pearson Commander, 1st CG District 150 Causeway Street Boston, Massachusetts 02114 (617) 233-3601 Home: (617) 223-3645	Capt. Alvin T. Durgin, Jr. 1st Coast Guard District 150 Causeway Street Boston, Massachusetts 02114 (617) 223-5707 Home: (617) 563-5338
3	Mr. William H. White Regional Federal Highway Administrator 1633 Federal Building Baltimore, Maryland 21201 (301) 962-2361 Home: (703) 860-2172	Mr. Claude S. Carpenter Federal Highway Administration 1633 Federal Building Baltimore, Maryland 21201 (301) 962-2372 Home: (703) 356-7153
4	Mr. Duane W. Freer Deputy Director FAA Southern Region P.O. Box 20636 Atlanta, Georgia 30320 (404) 526-7333 Home: (404) 761-3839	Mr. Vernon O. Darley Defense Readiness Officer FAA Southern Region P.O. Box 20636 Atlanta, Georgia 30320 (404) 526-7595 Home: (404) 366-8356
5	Mr. Gerald D. Love Regional Federal Highway Administrator 18209 Dixie Highway Homewood, Illinois 60430 (312) 799-6300 Home: (312) 799-0488	Mr. Roger D. Stokes Federal Highway Administration 18209 Dixie Highway Homewood, Illinois 60430 (312) 799-6300 Home: (312) 747-1298
6 (OP Region 7)	Mr. A. H. Thurburn Deputy Director FAA Southwest Region P.O. Box 1689 Ft. Worth, Texas 76101 (817) 624-6202	Mr. J. W. Skolaut Defense Readiness Officer FAA Southwest Region P.O. Box 1689 Ft. Worth, Texas 76101 (817) 624-6215 Home: (817) 927-8307

7 (OP Region 6)	Mr. John B. Kemp Regional Federal Highway Administrator P.O. Box 7186 Country Club Sta. Kansas City, Missouri 64113 (816) 926-7563 Home: (913) 642-7879	Mr. Robert W. Selzer Federal Highway Administration P.O. Box 7186 Country Club Sta. Kansas City, Missouri 64113 (816) 926-5239 Home: (913) 681-2508
8	Mr. William H. Baugh FHWA Administrator, Reg 8 Denver Federal Center Denver, Colorado 80225 (303) 234-4051 Home: (303) 238-6209	Mr. William H. Oliver FHWA Region 8 Denver Federal Center Denver, Colorado 80225 (303) 234-4051 Home: (303) 986-7894
9	VADM Mark A. Whalen Commander, Pacific Area USCG 630 Sansome Street San Francisco, California 94126 (415) 556-3860 Home: (415) 989-8491	Capt. David E. Metz U.S. Coast Guard, Pacific Area 630 Sansome Street San Francisco, California 94126 (415) 556-6524 Home: (415) 435-3998
10	RADM Chester A. Richmond, USCG Commander, 13th CG District 618 Second Avenue Seattle, Washington 98104 (206) 624-2200 Home: (206) 935-2086	Capt. Joseph A. Marciri 13th Coast Guard District 618 Second Avenue Seattle, Washington 98104 (206) 624-2283 Home: (206) 747-4528
AK*	Mr. Quentin S. Taylor Deputy Director FAA Alaskan Region 632 Sixth Avenue Anchorage, Alaska 99501 (907) 272-5561 (x203) Home: (907) 279-5977	Mr. Ralph Westover Defense Readiness Officer FAA Alaskan Region 632 Sixth Avenue Anchorage, Alaska 99501 (907) 272-5561 (x270) *also 548 Home: (907) 272-6334

* FTS Call Seattle, Washington Operator FTS 206-442-0150 Ask for Anchorage numbers.

DOT Secretarial Representatives

Region Secretarial Representative

1 David W. Hays Transportation Systems Center 55 Broadway Cambridge, Massachusetts 02142 617-494-2709	3 Leonard W. Johnson Gateway Building, Suite M300 3535 Market Street Philadelphia, Pennsylvania 19104 215-597-1081	5 Norman Erbe 17th Floor 300 S. Wacker Drive Chicago, Illinois 60606 312-353-4000
2 Lloyd Peterson 26 Federal Plaza, Room 1811 New York, New York 10007 212-264-2672	4 Theodore N. McDowell Suite 515 1720 Peachtree Road, NW. Atlanta, Georgia 30309 404-526-3738	6 Hon. Ed Foreman 9-C-18 Federal Center 1100 Commerce Street Dallas, Texas 75202 214-749-1851

7 RADM Russell R. Waesche
 601 E 12th Street, Room 634
 Kansas City, Missouri 64106
 816-374-5801

8 Robert Kessler
 Prudential Plaza, Suite 1822
 1050 17th Street
 Denver, Colorado 80202
 303-837-3242

9 Lawrence H. Dunn
 Box 36133
 450 Golden Gate Avenue
 San Francisco, California 94102
 415-556-5961

10 Donald Samuelson
 1321 Second Avenue,
 Room 5079
 Seattle, Washington 98101
 206-442-0590

ENERGY RESEARCH & DEVELOPMENT ADMINISTRATION

This statement describes the Energy Research and Development Administration's (ERDA) functions and capabilities in support of an interagency response to a radiological incident.

The Atomic Energy Act of 1954, as amended, assigned the Atomic Energy Commission (AEC) general responsibility for protecting the public health and safety from hazards that may arise during the development, use and control of nuclear energy. In 1958 the General Manager of the AEC's operating program established a system for taking emergency action in the event of serious offsite radiological emergencies that might result from a large-scale release of nuclear reactor fission products to the atmosphere or the spread of radioactive contamination from a plant processing large quantities of radioactive material. These activities and related resources were transferred to ERDA by the Energy Reorganization Act of 1974.

Radiological assistance responsibilities are assigned to certain ERDA Headquarters divisions and offices and to ERDA field offices. Eight of the field offices are assigned Regional Coordinating Office (RCO) responsibilities which include the development, maintenance, and

implementation of regional radiological assistance plans. Since the Interagency Radiological Assistance Plan (IRAP) assigns to the ERDA responsibility for overall management and administration to implement the IRAP, the ERDA Headquarters and field office organization for radiological assistance is used for achieving IRAP objectives. (Map on following page.)

In addition to the administrative effort, the ERDA will use its manpower and physical resources to protect the health and safety of individuals, the public and the environment in the event of an accidental release of radioactive material or ionizing radiation. These resources are located at ERDA sites through the United States. They include personnel, equipment and laboratory facilities applicable to radiological monitoring, decontamination, medical advice and emergency treatment, evaluation of personnel radiation exposure, radiological hazard assessment, technical and scientific advice, and emergency response to occurrences involving nuclear explosives. Under the IRAP, the applicable resources of other Federal agencies to cope with hazardous conditions resulting from radiological incidents and accidents are coordinated by the ERDA.

ENVIRONMENTAL PROTECTION AGENCY

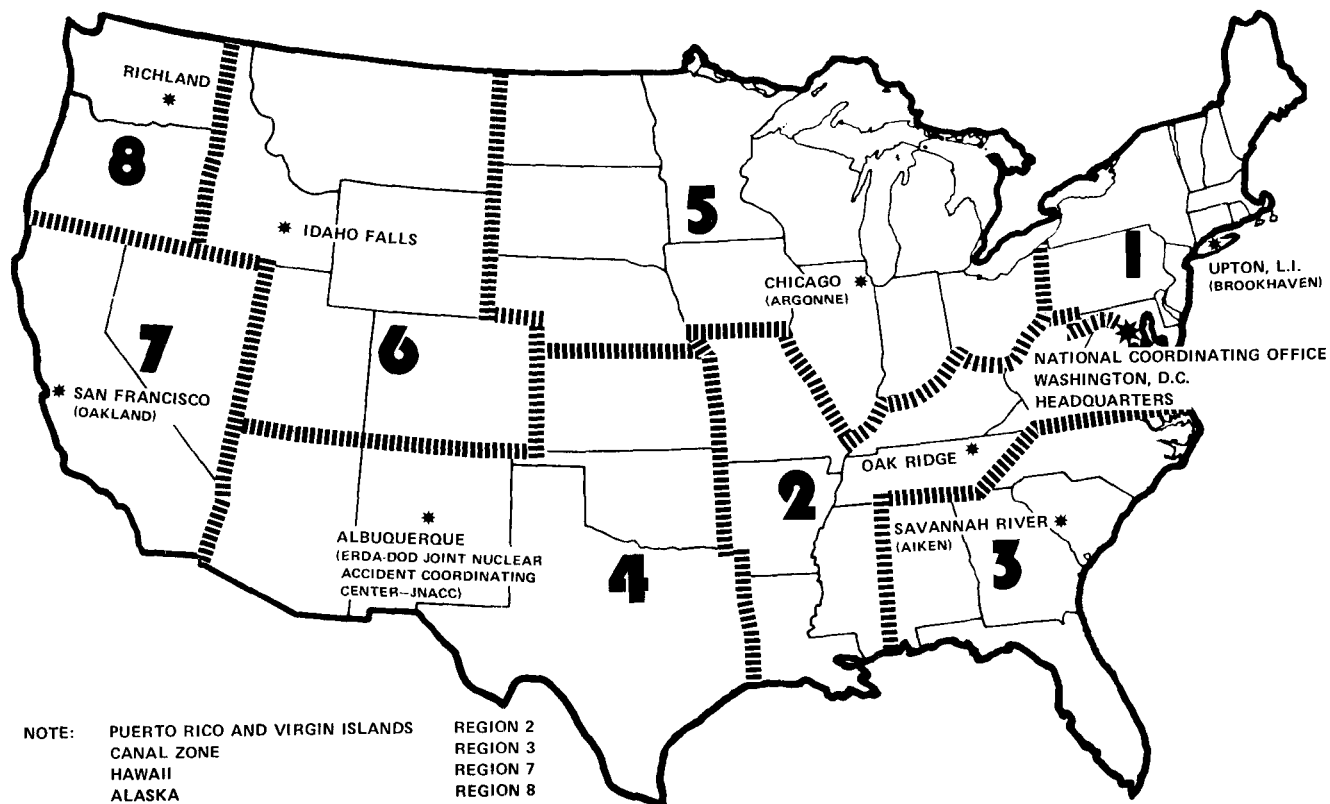
The following information describes the authorities, functions and capabilities of the Environmental Protection Agency (EPA) which would be used to support a coordinated Federal response to a radiological incident:

Authorities

1. EPA Order 2060.1 dated June 2, 1972, entitled, "Emergency Programs—Disaster Assistance Management." This Order provides a framework for Agencywide disaster assistance coordination and assigns responsibility for such coordination at the

Headquarters. The Disaster Relief Act of 1970 (PL 91-606) provides for revising and broadening the scope of existing major disaster relief programs and achieving greater coordination and responsiveness of Federal major disaster relief programs. The EPA Defense Coordinator (Director, Management and Organization Division, Office of Administration) shall provide for disaster assistance coordination at the Headquarters. In this capacity he shall provide the single point of contact at the Headquarters level for major disaster

ERDA Radiological Assistance Regions & Coordinating Offices



REGION	OFFICE	
1	Brookhaven	516 345-2200
2	Oak Ridge	615 483-8611 Ext. 3-4510
3	Savannah River	803 824-6331 Ext. 3333
4	Albuquerque	505 264-4667
5	Chicago	312 739-7711 Ext. 2111 Duty hours Ext. 4451 Off hours

REGION	OFFICE	
6	Idaho	208 526-0111 Ext. 1515
7	San Francisco	415 273-4237
8	Richland	509 942-7381

assistance communications and liaison with the Headquarters of the Federal Disaster Assistance Administration.

President's Reorganization Plan No. 3, dated December 2, 1970. Many of the radiological emergency response functions of the Bureau of Radiological Health, DHEW, were transferred to the EPA when this Agency was established in 1970.

3. **The Public Health Service Act, as amended, 42 USC 241, Section 301, and 42 USC 243, Section 311.** The act contains provisions for providing technical assistance and other appropriate actions to states for protection of public health.

Emergency Radiological Assistance

The Office of Radiation Programs, EPA, and the Bureau of Radiological Health, FDA, by mutual agreement have assigned the lead responsibility to the Office of Radiation Programs for coordinating responses to requests for radiological assistance. Radiological assistance available from the Office of Radiation Programs, the Bureau of Radiological Health, FDA, and the Office of the Executive Director of Regional Operations, FDA, consists of monitoring teams that have the capability for measuring environmental radiation, evaluating the extent of the contamination, and advising on the actions that should be taken for protection of public health and safety. Each team also can collect samples for subsequent processing and analysis at its laboratory.

BRH and EPA Facilities with Radiological Assistance Teams. Radiological Assistance Teams are located at the following EPA or BRH facilities:

Winchester Engineering and
Analytical Center (FDA)
109 Holton Street
Winchester, Massachusetts 01890

Eastern Environmental Radiation
Facility (EPA)
Post Office Box 3009
Montgomery, Alabama 36109

Office of Radiation Programs (EPA)
National Environmental Research Center
Post Office Box 15027
Las Vegas, Nevada 89114

Radiochemistry and Nuclear
Engineering Facility (EPA)
National Environmental Research Center
Environmental Protection Agency
5555 Ridge Avenue
Cincinnati, Ohio 45213

Office of Radiation Programs
(Headquarters EPA)
Waterside Mall-East Tower
401 M Street, SW.
Washington, D.C. 20460

Bureau of Radiological Health
(Headquarters FDA)
12720 Twinbrook Parkway
Rockville, Maryland 20852

The Office of Radiation Programs has located at the Eastern Environmental Radiation Facility, a mobile van equipped with emergency response equipment and laboratory analytical instruments available to respond to requests for assistance in the Eastern United States. At the Office of Radiation Programs' Las Vegas facility, aerial monitoring support is available for responding to requests for assistance. This aircraft is equipped with mobile monitoring equipment and has the capability for collecting and analyzing air samples.

INTERSTATE COMMERCE COMMISSION

Participation of the Interstate Commerce Commission (ICC) in the IRAP would be in the area of assisting in the arrangements for or expediting the emergency transportation of people and/or property moving in interstate or foreign commerce to or from distressed areas by domestic surface transportation in the event of a radiological incident.

The ICC's regulatory authority is established by Federal statute, i.e., the Interstate Commerce Act. Listed below are possible actions available in the several areas:

- With respect to the railroad industry, there is existing statutory authority which permits the issuance of car service orders, rerouting orders, and if necessary, establishing priorities in the movement of freight.

Considering the broad economic impact this modal area contributes to our national economy, decisions as operating authority to qualified motor carrier applicants when the need exists.

- Concerning motor carrier operations, the Commission has statutory authority to grant emergency temporary to the issuances of such orders are made at the National Headquarters. Recommendations by the Commission's field staff are an integral part of the decision-making process.
- In the water carrier area, the same statutory authority

exists concerning issuing temporary authority where required.

The ICC Regional Managers listed below provide coordination of IRAP activities at the regional level. However, during times of crisis the field staff must man their individual offices in order to handle the various emergency requests that are generated by the crises situation.

ICC REGIONAL MANAGERS

Robert L. Abare
Boston, Massachusetts

James B. Weber
Atlanta, Georgia

Harold M. Gregory
Fort Worth, Texas

J. Warren McFarland
San Francisco, California

Fred E. Cochran
Philadelphia, Pennsylvania

Alfred E. Rathert
Chicago, Illinois

NATIONAL AERONAUTICS & SPACE ADMINISTRATION

In conformity with the Space Act of 1958, National Aeronautics and Space Administration (NASA) activities in aeronautical and space exploration are devoted to peaceful purposes for the benefit of all mankind. Activities at NASA installations vary considerably; however, overall activities include research and development, design, construction, testing, launching, tracking, and information retrieval and analysis. Various types of radioisotopes and other sources of ionizing radiation are used in conjunction with the space program.

Resources and/or capabilities which could be made available for radiological emergency operations subject to essential operational requirements of NASA include:

- Radiological, environmental health, and medical support personnel.
- Full range of radiation sampling, detection, and monitoring instruments.

- Laboratory support (radiation and analytical chemistry).
- Firefighting equipment and personnel.
- Generators and communications equipment.
- Motor pool vehicles.
- Heavy equipment (cranes, earthmoving, etc.)
- Heat sensing surveillance by both aircraft and satellite.

NASA officials at the facilities listed below are responsible for NASA regional participation in the Interagency Radiological Assistance Plan. The resources of these facilities can be made available for radiological emergencies. There are no geographical areas of responsibility beyond the land associated with each installation.

NASA Headquarters
600 Independence Avenue, SW.
Washington, D.C. 20546

Lewis Research Center
21000 Brookpark Road
Cleveland, Ohio 44135

Johnson Space Center
Houston, Texas 77058

Langley Research Center
Hampton, Virginia 23365

Wallops Flight Center
Wallops Island, Virginia 23337

Jet Propulsion Laboratory
4800 Oak Grove Drive
Pasadena, California 91103

Flight Research Center
Post Office Box 273
Edwards, California 93523

Goddard Space Flight Center
Greenbelt, Maryland 20771

Marshall Space Flight Center
Huntsville, Alabama 35812

Ames Research Center
Moffett Field, California 94035

Kennedy Space Center
Kennedy Space Center, Florida 32899

NUCLEAR REGULATORY COMMISSION

's statement describes the Nuclear Regulatory Commission's (NRC) functions and capabilities in support of an interagency response to a radiological incident.

Investigation of Radiological Incidents

The NRC has five Regional Inspection and Enforcement Offices whose function is the inspection of all facilities and materials licensed under the Atomic Energy Act of 1954, as amended, and enforcement of the Commission rules and regulations and license requirements. The Inspection and Enforcement staff is responsible for collecting and evaluating the facts and circumstances attending inadvertent or accidental release of radioactive material to the environment from a licensed nuclear facility and the accidental over-exposure of persons to radiation from by-product, special nuclear or source materials licensed for use in industry, research or medicine. The NRC is capable of making detailed investigations of incidents involving radioactive materials.

Manpower and Equipment Resources

The NRC staff has a large number of managerial, technical, and professional personnel, whose combined and individual expertise can provide a significant manpower resource to the IRAP in the event of serious radiological incidents. Unlike ERDA, however, no emergency equipment or "hardware" resources are currently directly available within NRC except via limited contractual arrangements for radiological surveillance programs and other similar limited applications.

The NRC recognizes that as the private (licensed) sector of the nuclear industry continues to grow, NRC may need to assume a more active operational role in responding to emergency situations arising from licensed activities.

● Region 1

(Connecticut, Delaware, District of Columbia, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont)

Office of Inspection and Enforcement
USNRC
631 Park Avenue
King of Prussia, Pennsylvania 19406
Telephone: 215-337-1150

● Region 2

(Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, Panama Canal Zone, Puerto Rico, South Carolina, Tennessee, Virginia, Virgin Islands, and West Virginia)

Office of Inspection and Enforcement
USNRC
Suite 818
230 Peachtree Street, NW.
Atlanta, Georgia 30303
Telephone: 404-526-4503

● Region 3

(Illinois, Indiana, Iowa, Michigan, Minnesota, Missouri, Ohio, and Wisconsin)

Office of Inspection and Enforcement
USNRC
799 Roosevelt Road
Glen Ellyn, Illinois 60137
Telephone: 312-858-2660
Nights and Holidays: 312-739-7711

● Region 4

(Arkansas, Colorado, Idaho, Kansas, Louisiana, Montana, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, Utah, and Wyoming)

Office of Inspection and Enforcement
USNRC
Suite 1000
611 Ryan Plaza Drive
Arlington, Texas 76012
Telephone: 817-334-2841

● Region 5

(Alaska, Arizona, California, Hawaii, Nevada, Oregon, Washington, and U.S. territories and possessions in the Pacific)

Office of Inspection and Enforcement
USNRC
Suite 202
1990 N California Boulevard
Walnut Creek, California 94956
Telephone: 415-486-3141