

The Southern Mutual Radiation Assistance Plan



Southern States Energy Board

The Southern Mutual Radiation Assistance Plan

February 2024



Southern States Energy Board

The Southern Mutual Radiation Assistance Plan

February 2024

Administered by: Southern Emergency Response Council

Secretariat: Southern States Energy Board 6325 Amherst Court Peachtree Corners, Georgia 30092

770.242.7712 770.242.0421 fax 770.242.9956 fax

www.sseb.org sseb@sseb.org



Table of Contents

Prefaceiv
Introduction
The Southern Mutual Agreement for Mutual State Radiological Assistance4
By-Laws of the Southern Emergency Response Council
SMRAP - A Summary Plan
SERC Officers
SMRAP Activation Procedure
Requesting State; Responding State; and Radiation Control Program
SMRAP Key Contacts
State Agencies
Alabama24
Arkansas27
Florida
Georgia
Kentucky42
Louisiana47
Mississippi50
Missouri
North Carolina
Oklahoma61
South Carolina63
Tennessee
Texas
Virginia77
Federal Agencies
Federal Emergency Management Agency80
U.S. Department of Energy84
U.S. Environmental Protection Agency85
U.S. Nuclear Regulatory Commission86
Tennessee Valley Authority87

Preface

The Southern Mutual Radiation Assistance Plan (SMRAP) provides a mechanism for coordinating radiological emergency assistance capabilities among participating states. SMRAP is authorized under the provisions of the Southern Agreement for Mutual State Radiological Assistance, which was signed by the governors of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee in 1973. The governors of Arkansas, Louisiana, Oklahoma and Texas signed in 1974, Missouri's governor signed in 1975, and Governor Wilder of Virginia signed the agreement in 1990. The authority for entering into supplemental agreements by any of the southern states is provided by Public Law 87-563, which grants U.S. Congressional approval of the Southern Interstate Nuclear Compact.

The Southern Mutual Radiation Assistance Plan is reviewed, revised and administered on a permanent basis by the Southern Emergency Response Council (SERC), which was established for that purpose under the terms of the agreement. The council consists of radiological health program directors from each signatory state and the executive director of the Southern States Energy Board (SSEB), formerly known as the Southern Interstate Nuclear Board (SINB). SSEB also serves as the SERC secretariat.

The plan contains general provisions and detailed resource information and is designed to serve the needs of state administrators as well as state radiological health personnel in their everyday activities. This document is updated regularly to ensure accuracy of federal and state agency information.

We hope that this approach to resolving radiation assistance problems in the southern states, as outlined in SMRAP, will provide useful direction and guidance to others with similar objectives.

Kenneth J. Nemeth Executive Director - The Southern States Energy Board -February 2024

Introduction

With the discovery of radium and x-rays, and more recently the development and testing of nuclear weapons, it has become necessary to have plans to control potentially harmful radiation exposure to people should radiological mishaps occur. In 1961, the Interagency Radiological Assistance Plan (IRAP) was created. Thirteen federal agencies voluntarily entered into the plan. IRAP's primary purpose was to establish an organization and operating arrangements to be used in the event of a major accidental release or loss of control of radioactive material which could seriously endanger public health or safety. The Nuclear Regulatory Commission (NRC) is responsible for the administration of IRAP, with the Department of Energy (DOE) serving as the lead agency. Three of the signatory agencies -- NRC, DOE and the Environmental Protection Agency (EPA) -- maintain emergency teams on a continuing basis that are capable of responding to radiological emergencies.

In addition to the IRAP, the states began establishing radiological health programs. These programs were created during a period of intensive nuclear weapons testing by the United States and the former Soviet Union. Consequently, some states, such as North Carolina and Kentucky, prepared emergency plans to minimize population radiation exposures from excessively high fallout levels. However, the plans assumed less significance as levels of radiation began to decrease in the mid-1960s.

Throughout this period, nuclear power plants, research reactors, nuclear fabrication plants and nuclear fuels reprocessing plants were constructed and began operation. Interest grew in establishing plans to control the effects of possible radiation accidents, involving both fixed nuclear facilities and radioactive materials shipments. Some states requested assistance with the writing of emergency procedures from appropriate federal agencies. In December 1979, President Carter created the Federal Emergency Management Agency (FEMA) and designated it as the lead agency in radiological emergency planning and response. Subsequently, FEMA and NRC prepared a document entitled *Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants (NUREG-0654/FEMA-REP-1)*, which assisted the states in developing revised and detailed plans.

Need for Regional Assistance Planning

Radioactive materials are in significant use both in the United States and internationally. Though the probability of a radiation incident is low, the potential consequences of such an incident in the absence of a competent state and regional response capability are extreme. Producers and users of radioactive materials are scattered across the states, with each state having a different radiation protection program and different resource capabilities. Therefore, a radiation incident in one state may require resource capabilities that the affected state does not have.

For this reason, both state and regional needs must be examined when developing a fully coordinated emergency assistance program. This approach provides for the economical use of public funds, as well as the maintenance of adequate protection levels for the health and welfare of the region's citizens. Federal agencies, state agencies and private industry have developed independent radiation emergency response capabilities, and there have been efforts to coordinate existing capabilities and bridge the gaps among the various emergency response modules in the southern region. FEMA uses NUREG-0654 as a mechanism to merge these capabilities. The Southern Mutual Radiation Assistance Plan (SMRAP) factors ideally into the NUREG-0654 concept and also serves as a logical extension of IRAP.

Development of Regional Assistance Planning

In January 1972, as a first step in the development of radiological assistance planning on a regional basis, the Region IV office (Atlanta) of the EPA and the Southern States Energy Board (SSEB), formerly known as the Southern Interstate Nuclear Board (SINB), organized a conference on radiological emergency planning. This regional approach to mutual emergency response planning was unprecedented. Prior to this, there existed only the conviction that future nuclear and radiation activities required regional planning to meet possible radiological emergency situations.

The conference resulted in the formation of a Radiation Emergency Response Committee, consisting of radiological health representatives from SSEB member states, federal agencies and industries with radiological response capabilities. The committee's objective was to develop a regional radiological emergency assistance plan for the southern states. The committee met during 1972 and 1973 and concluded that:

- 1. The principle of mutual assistance is unusually applicable to radiation emergency planning;
- 2. Regional planning is required to protect the public welfare from emergencies with interstate implications;
- 3. The interstate compact is the only legal means for cooperation among the states in matters of this nature;
- 4. Interstate cooperation is enhanced by responsible recognition of similarities among states' problems and needs;
- 5. Problems arising from dissimilar state organization structure or laws can be overcome without damage to basic requirements of a common problem; and
- 6. Effective state cooperation will be applauded and recognized by federal agencies and result in a better partnership between the states and the federal government.

The committee drafted a Southeastern Mutual Radiation Assistance Plan (SMRAP), and the supplemental agreement, to be executed by the states under the provisions of the Southern Interstate Nuclear Compact legislation, Public Law 87-563. The organization and basic functions of the Southeastern Emergency Response Council (SERC), the council created to administer the SMRAP on a permanent basis, were determined, and the committee dissolved itself, having fulfilled its objective.

The governors of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee signed "The Southeastern Agreement for Mutual Radiological Assistance" during the September 1973 Southern Governors' Conference. "Southeastern" was changed to "Southern" in the plan and agreement title, with the additional signatures of the governors of Arkansas, Louisiana, Missouri, Oklahoma and Texas in 1974 and 1975. Virginia joined the agreement in 1990.

The visibility of emergency assistance programs, through the dissemination of pertinent information on emergency requirements in every state, is necessary with regard to the allocation of funds for emergency assistance planning and implementation. It is important to make state government decision makers aware that emergency assistance capability is a necessary and proper item for public expenditures. These funds are necessary for the development of state emergency assistance capability, specifically the training and maintenance of state emergency assistance teams. The nature of emergency assistance capability requirements does not easily lend itself to a specific organization because it is not a constant need. Therefore, the most cost-efficient radiation control program is one in which the various assistance teams are performing other duties as well.

Providing emergency assistance for radiological incidents involves areas of responsibility within the scope of a number of state agencies. An incident involving radiation also involves state and local law enforcement agencies, as there may be problems of a non-radiological nature. A mechanism whereby various agencies of state and local government cooperate to solve the problem, regardless of its complexity, is necessary. To this end, a lead agency should be given authority by the state to coordinate all necessary interagency activities. The council recommends that, because the major threat may be radiation exposure or contamination, the state radiological health program director should lead that cooperative venture. It should be noted that SMRAP is only an assistance plan, with the actual emergency response executed entirely by the states, or jointly with federal teams at the state's request.

Legal Basis for Regional Action

The Southern Interstate Nuclear Compact was enacted by the legislatures of each member state and ratified by Congress on July 31, 1962. This legislation, P.L. 87-563, states that it is the national policy to encourage and to recognize the performance of functions by the states with respect to the peaceful use of nuclear energy in its several forms. The law further states that the federal government recognizes that many programs in nuclear fields can benefit from cooperation among the states, as well as between the federal government and the states.

The provisions of P.L. 87-563 which grant authority for SSEB member states to enter into the SMRAP supplementary agreement under the legislation are Article V(1) and Article VI(a). These sections are quoted below:

Article V(1)

Ascertain from time to time such methods, practices, circumstances, and conditions as may bring about the prevention and control of nuclear incidents in the area comprising the party states, to coordinate the nuclear incident prevention and control plans and work relating thereto of the appropriate agencies of the party states and to facilitate the rendering of aid by the party states to each other in coping with nuclear incidents. The Board may formulate and, in accordance with need from time to time, revise a regional plan or regional plans for coping with nuclear incidents within the territory of the party states as a whole or within any subregion or subregions of the geographic area covered by this compact.

Article VI (a)

To the extent that the Board has not undertaken an activity or project which would be within its power under the provisions of Article V of this compact, any two or more of the party states (acting by their duly constituted administrative officials) may enter into supplementary agreements for the undertaking and continuance of such an activity or project. Any such agreement shall specify its purpose or purposes; its duration and the procedure for termination thereof or withdrawal therefrom; the method of financing and allocating the costs of the activity or project; and such other matters as may be necessary or appropriate. No such supplementary agreement entered into pursuant to this article shall become effective prior to its submission to and approval by the Board. The Board shall give such approval unless it finds that the supplementary agreement or the activity or project contemplated thereby is inconsistent with the provisions of this compact or a program or activity conducted by or participated in by the Board.

The Southern Agreement for Mutual State Radiological Assistance

Supplemental Agreement Under the Southern Interstate Nuclear Compact

We, the undersigned states, recognize the benefits which have accrued to our jurisdictions from science and technology. Of equal importance are the costs we have borne while improving our lifestyle through innovations of both tangible and intangible means. When the costs of progress are such as to possibly affect the health and welfare of our states' citizens, the States must act to mitigate any potential losses and to minimize costs. Our concurrence in this agreement demonstrates the acceptance of a regional as well as a state responsibility for protecting the interests of our citizens in the event of a radiation incident or other emergency.

Our states are aware that thousands of shipments of radioactive materials cross our boundaries annually. Those shipments will grow in numbers, volume and type in future years. Nuclear power plants, fuel processing plants, fuel fabricating plants and other nuclear facilities are being constructed and operated in every one of our states. The growth of nuclear science in medicine, industry and agriculture will cause even greater numbers of shipments of radioisotopes to originate and terminate within our borders.

All of our states are proud that we have anticipated the problems of emergency response to radiation incidents by maintenance of adequate state response capability. During numerous emergencies involving actual or possible spills of radioactive materials, we have suffered no personal injuries or property damage. We are confident that such will continue to be the case only with continued vigilance.

The increased volume and numbers of radioactive materials shipments will place greater burdens on state response capability. While confident that our capabilities will be adequate to meet the need, we recognize the possibility of an accident occurring of either an interstate nature, possible interstate nature or of a magnitude greater than our individual capability to meet.

For these reasons, we agree to cooperate in providing assistance each to the others in coping with any radiation incident within our states, when such incident is deemed by the governor, or other duly authorized state administrator, to require such assistance. To achieve this end, under the authority granted us by state and federal law, we hereby enter into the following supplemental agreement:

Article I. Purpose

The purpose of this supplemental agreement is to provide a cooperative mechanism within the southern region for mutual assistance in responding to radiation incidents upon request by any party to this agreement.

Article II. Responsibility

We, the undersigned, do hereby agree to provide any and all reasonable and available resources to any other party to this agreement for coping with any radiation emergency

deemed to be outside the capability of the initiating state, or if any actual or possible violation of mutual borders by such incident has occurred. An emergency shall be deemed outside the capability of the initiating state when so attested by the governor of that state in a communiqué to another party to this agreement. The governor of the responding state(s) shall determine the degree to which his state(s) may respond and promptly cause to be dispatched all available and necessary resources to assist with the emergency. The emergency shall be deemed to have passed whenever the lead agency of the initiating state informs other responding teams of its passage.

Article III. Reimbursement

Any state requesting assistance under the provisions of this agreement shall provide reimbursement for all reasonable costs incurred by any and all responding states, except that a responding state may waive such costs in favor of a credit for future reciprocal action under the terms of this agreement.

Article IV. The Plan

All action taken under this agreement will be in accord with the Southeastern Mutual Radiation Assistance Plan administered by the Southeastern Emergency Response Council (SERC).

Article V. Administration

As stated in Article IV, a Southeastern Emergency Response Council (SERC) will serve to review, revise and administer the Southeastern Mutual Radiation Assistance Plan. SERC will be composed of the Radiation Control officer from each party state and the Executive Director of the Southern Interstate Nuclear Board. Ex-officio members, as necessary, may be designated by SERC to assist in the performance of its duties. The council shall operate under a constitution and by-laws and shall conduct investigations and provide other necessary assistance to party states in furtherance of its purpose as stated in Article I.

Article VI. Duration, Amendment and Withdrawal

This agreement shall be in force until terminated by all signatory parties. Amendments to include additional states as participants will become effective upon signature of copy of this agreement by the governor of the joining state(s). Other amendments require approval by two-thirds of the signatory states. A party to this agreement may withdraw by notifying other parties in writing of such action, but such notification shall be signed by the governor of the withdrawing state.

Article VII. Eligibility

Parties to this agreement shall initially be the states of Alabama, Florida, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee. However, the signatory states express their willingness and desire to extend this agreement to all members of the Southern Interstate Nuclear Compact. In such case, the signatory states hereby consent in advance to any eligible state(s) becoming a party hereto. APPROVED OF AND AGREED TO THIS 25th DAY OF SEPTEMBER, A.D., 1973:

Jaelar

George C. Wallace Governor

Reubin O'D. Askew Governor

State of Alabama

State of Florida

Jimmy Carter Governor State of Georgia

William L. Waller Governor State of Mississippi

John C. West Governor State of South Carolina

Wendall H. Ford Governor

Commonwealth of Kentucky

James E. Holshouser, Jr. Governor State of North Carolina

Winfield Dunn Governor State of Tennessee

ATTEST: Čhairman

Southern Interstate Nuclear Board

APPROVED OF AND AGREED TO THIS 25th DAY OF SEPTEMBER, A.D., 1973:

Dale Bumpers Governor State of Arkans Edwin W. Edwards Covernor ate of Louisiana **a**s David Ha Dolp Governor Governor State of Texas State of Oklahoma

ATTEST:

Chai man Southern Interstate Nuclear Board

APPROVED OF AND AGREED TO THIS 17th DAY OF SEPTEMBER, A.D., 1975:

aa

Christopher S. Bond Governor State of Missouri

gth DAY OF Augut 1990. APPROVED OF AND AGREED TO THE __

Lawrence Douglas Wilder Governor State of Virginia

By-Laws of the Southern Emergency Response Council

Article I. Name

The name of this organization shall be the Southern Emergency Response Council.

Article II. Authority

The council is formed by authority of the Southern Agreement for Mutual State Radiological Assistance, a supplemental agreement under P.L. 87-563, the Southern Interstate Nuclear Compact.

Article III. Object

The object of this organization shall be to review, revise and provide for expeditious implementation of the Southern Mutual Radiological Assistance Plan; to assist individual members and their states in developing and maintaining an adequate capability for responding to a radiation incident; and to perform such other related duties as will further radiation protection for the public through prevention of and/or response to a radiation incident, including but not limited to public information activities, training and seminars, professional information dissemination, evaluation or standardization of equipment and its calibration, and liaison with other organizations conducting activities of interest to the Council.

Article IV. Membership

<u>Section 1</u>. Membership in this council shall consist of the executive director of the Southern States Energy Board and one representative from each signatory state to the Southern Agreement for Mutual State Radiological Assistance who shall be the radiological health program director for that state, or such person as designated by the governor. <u>Section 2</u>. Each member may designate an alternate who shall have full power to act on any matter before this Council in assembly when the member is absent.

Article V. Officers

<u>Section 1</u>. The elected officers of this council shall be the chairman and vice chairman. The secretary shall be the executive director of the Southern States Energy Board. These officers shall perform the duties prescribed by the by-laws and by the parliamentary authority adopted by the council. Since this council does not have a president, the chairman shall perform those duties when such is required, and which may differ from those normally assigned to a chairman.

<u>Section 2</u>. At least 60 days prior to the annual meeting, a nominating committee of three members shall be appointed by the chairman. It shall be the duty of this committee to nominate candidates for the offices to be filled at the annual meeting; nominations from the floor shall be permitted in addition.

<u>Section 3</u>. The officers shall be elected by secret ballot except where such election is made moot by unanimous consent to a motion by the nominating committee for election of its proposed slate of officers. Their term of office shall begin at the close of the annual meeting at which they are elected. The nominal term of office of the officers shall be for one year.

Article VI. Meetings

<u>Section 1</u>. An annual meeting of the council shall be held once a year at a time and place designated by the executive board, and shall be for the purpose of electing officers, receiving reports of officers and committees, and for any other business that may arise. <u>Section 2</u>. Special meetings can be called by the chairman with concurrence of the executive board and shall be called upon the written request of a majority of members. The purpose of the meeting shall be stated in the call. Except in cases of emergency, at least two (2) weeks notice shall be given by telephone or wire and four (4) weeks notice if by mail. <u>Section 3</u>. A majority of the members shall constitute a quorum of the council. <u>Section 4</u>. Minutes shall be taken at all meetings of the council and distributed to the members within four (4) weeks following the meeting.

Article VII. The Executive Board

<u>Section 1</u>. The officers of the council shall constitute the executive board.

<u>Section 2</u>. The executive board shall have general supervision of the affairs of the council between meetings.

<u>Section 3</u>. Meetings of the executive board shall be held upon call of the chairman and shall be open to all members. The board, in conducting such meetings, shall be subject to the orders of the council and none of its acts shall conflict with action taken by the council. A conference telephone call shall be considered a bona fide meeting of the executive board. <u>Section 4</u>. Minutes are to be taken at all executive board meetings and shall be disseminated to all council members within two (2) weeks after each such meeting. <u>Section 5</u>. Three members shall constitute a quorum of the executive board.

Article VIII. Committees and Advisors

<u>Section 1</u>. Such committees as are considered by the chairman or the council to carry on the work of council shall, from time to time, be appointed by the chairman. The chairman shall be an ex-officio member of all committees except the nominating committee. <u>Section 2</u>. A standing advisory committee shall assist the council in all its deliberations. Committee members are authorized to cooperate with the council under a committee charter adopted by the council. Federal members of the standing advisory committee have an additional authority under P.L. 87-563, the Southern Interstate Nuclear Compact. <u>Section 3</u>. Membership of the standing advisory committee shall consist of federal agency and industrial representatives as designated by the executive board. <u>Section 4</u>. Advisors can be named by the chairman, the committees and by the membership of the council to serve at their pleasure for special purposes.

Article IX. Parliamentary Authority

The rules contained in the current edition of Robert's Rules of Order - Newly Revised shall govern the council in all cases to which they are applicable and in which they are not inconsistent with these by-laws and any special rules of order the council may adopt.

Article X. Amendment of By-Laws

These by-laws can be amended at any meeting of the council by a two-thirds vote of the membership of the council, provided that the amendment has been submitted in writing to the chairman 30 days prior to the call of the meeting and is included in such call as special item for consideration.

Article XI. Secretariat

The Southern States Energy Board (SSEB) shall function as secretariat for the Southern Emergency Response Council.

SMRAP - A Summary Plan

Section A: Purpose

The purpose of this plan is to protect the health and safety of the public in the event of accidents, if the magnitude or type of accident is outside the response resources available to any single signatory of the plan. These accidents include those occurring at nuclear facilities; during the transportation of radioisotopes, nuclear fuel or radioactive waste; and during the use of radioactive sources.

The mechanism for cooperation of radiological emergency assistance capabilities developed herein will serve also to improve the efficiency of providing assistance during an accident that involves a boundary watercourse of two or more signatory states.

Additionally, coordination among signatory states will meet the purpose of providing assistance to individual signatory states in the development of their radiation emergency response capabilities and plans.

Section B: Objectives

The objectives of this Plan are as follows:

- 1. To identify authority and assignment of responsibility under federal and state statutes which provide a basis for developing and implementing this plan;
- 2. To promulgate a mechanism for administering this plan;
- 3. To identify the scope of the radiological emergency assistance developed under this plan, both geographically and functionally;
- 4. To identify each agency and available resources located within signatory states available for implementing action under this plan, including the role to be played by each resource;
- 5. To develop standardized Protective Action Guides for use in the region;
- 6. To provide a mechanism limiting state employee (including university or college) personal liability for his or her actions when called upon to provide assistance during any emergency within the scope of this plan; and
- 7. To provide for federal and regional assistance to the states in maintaining and revising state capabilities for providing assistance under this plan, including:
 - a. providing a mechanism for obtaining expert consultants or specialists upon request;
 - b. holding seminars on special courses; and
 - c. disseminating information to public sources designed to educate them concerning the capabilities of this plan.

Section C: Authority

The authority for entering into this plan exists within the scope of the Southern Interstate Nuclear Compact, Public Law 87-563, and its provisions for supplemental agreements by any of the southern states.

Section D: Administration

Emergency response plans will periodically be reviewed so they can respond to changes in their underlying conditions. Periodic, regional meetings will be held for coordination of activities that impact plan capabilities. This phase of administration will be directed by the Southern Emergency Response Council (SERC), comprised of one representative from each

signatory state and from SSEB, and such ex officio representatives from federal agencies and other organizations as the council deems necessary.

The SERC will adopt by-laws for its operation and will meet as required to fulfill its objectives.

Administration, for the purpose of responding to an accident, will be fulfilled under the emergency response framework for plan implementation as outlined in Section F, "Resources." Any accident occurring within a signatory state is under the jurisdiction of that state. Parties to this agreement concur that if it is necessary for resources to move from one state to another, the receiving state's administrative authority will prevail. Decisions for responding to a request for assistance with the provisions of resources will fall to the assisting state. Outside assistance is supplemental to state resources. Response to an accident would be coordinated through the alert communications network as specified in Section F(2), "Communications."

Section E: Scope

The area scope of this mutual assistance plan includes the territories of fourteen southern states (Alabama, Arkansas, Florida, Georgia, Kentucky, Louisiana, Mississippi, Missouri, North Carolina, Oklahoma, South Carolina, Tennessee, Texas and Virginia) with provisions for including additional SSEB states. The organizations cooperating under this plan may include federal agencies, state agencies, industrial groups, private action agencies and individuals of special expertise.

Industry will be included as a valuable resource for regional consideration and use. Since the plan is being implemented by public organizations, industrial participation has been limited to an advisory role in the developmental aspects of planning. While industry can provide expertise and services for planning or implementation, no industry funds will be solicited for mutual assistance. For the most effective and efficient leadership in mutual assistance planning, the industry's resources will be coordinated through its state radiological emergency plan. These provisions for delineating the role of industry are also applicable in the case of private educational institutions.

The role of federal agencies will be limited to one of advice and coordination, unless otherwise requested by the states.

Section F: Resources

1.<u>Emergency Teams</u> - Each signatory state maintains an emergency team ready to respond to a radiation accident at any time. The teams consist of qualified and experienced health physics personnel with appropriate radiation detection instrumentation and equipment that would be required to handle anticipated emergency situations. If assistance is required, the Southern Mutual Radiation Assistance Plan (SMRAP) provides communications with the U.S. Department of Energy teams at either Savannah River Plant, Aiken, South Carolina, or Oak Ridge Operations, Oak Ridge, Tennessee; the Environmental Radiation Facility, Montgomery, Alabama; a Tennessee Valley Authority team at Muscle Shoals, Alabama and

Chattanooga, Tennessee; and the Federal Emergency Management Agency, Thomasville. These facilities maintain an emergency response capability that is available round-the-clock and will assist a state upon request.

2.<u>Communications</u> - A communication system among the signatory states and between the states and federal agencies having emergency response capability in the form of a round-the-clock telephone system has been prepared. Arrangement for intrastate radio communications networks is considered a necessary complement to the telephone system and should become a part of each state plan (e.g., the DOD National Warning System - NAWAS).

3.<u>Equipment</u> - Each signatory state maintains radiation detection instrumentation, decontamination material and other equipment required to handle radiation accidents. However, the SMRAP provides the states access to unusual survey and monitoring instruments and/or very complex laboratory radiation measurement and analytical equipment that they would not normally possess.

4.<u>Medical Facilities</u> - Radiation accident casualties demand specialized care and treatment, thus requiring hospitals or clinics having the necessary facilities, equipment and trained personnel. At least one facility in each signatory state is identified, and state plans will provide for joint cooperative agreements among the state radiation protection agency and the facilities.

5.<u>Transportation</u> - Statistical analyses indicate a probability that a certain number of radiation accidents per number of radioactive material shipments will occur. The SMRAP, therefore, delineates factors that a state should consider in establishing measures to control the effects of this type of accident. If the accident involves more than one state, then appropriate federal agencies must be involved.

6.<u>Public Relations</u> - The sensitive area of public relations and press coverage in the wake of a radioactive accident must be handled in a calculated and pragmatic manner. If the accident involves more than one state, the SMRAP will provide for the appropriate federal agency, in conjunction with the states, to issue press releases and to interface with the public. If the accident is intrastate only, the state plan will provide for authority. 7.<u>Laboratories</u> - Each signatory state has a radiological laboratory capable of analyzing

various media for radioactivity. If a radiation accident is of such scope or character that quantitative and/or qualitative assistance is required, the laboratories of the U.S. Department of Energy at Savannah River Plant, Aiken, South Carolina; Oak Ridge Operations, Oak Ridge, Tennessee; and the Environmental Protection Agency, Montgomery, Alabama may be utilized.

8.<u>Civil Defense</u> - State and federal civil defense organizations have expertise in handling of radiation accidents, particularly in the areas of communication and evacuation. This capability may be factored into state emergency plans as applicable.

9. <u>Protective Action Guides</u> - Protective Action Guides are developed by the EPA and are available for use by individual states. They are unofficial but should be useful in establishing standardization.

Assistance to Signatory States

Assistance to signatory states may include the following:

- 1. provision of training-development of emergency response capability;
- 2. consultation and advice on emergency response planning and plans; and
- 3. stimulation of interstate coordination and cooperation.

Assistance will be delivered through the following methods:

- 1. seminars on subjects requested by the state;
- 2. designations of specific radiation experts to provide states with information required to solve environmental programs; and
- 3. provision of the latest information on all phases of the environmental radiation field on a continuing basis.

SERC Officers

2023-2024 Chair: Keisha Cornelius - OK Vice-Chair: Shatavia Walker - GA Karen Burgard - LA; Russell Hestand - KY Members-at-Large: Christopher Wells – SSEB Secretary: 2022-2023 Chair: Steve Mack - AR Vice-Chair: Keisha Cornelius - OK Shatavia Walker - GA; Karen Burgard - LA Members-at-Large: Christopher Wells – SSEB Secretary: David Matos - GA 2021-2022 Chair: Vice-Chair: Steve Mack - AR Keisha Cornelius - OK; Jeff Dauzat - LA Members-at-Large: Secretary: Christopher Wells – SSEB 2020-2021 Chair: John Williamson - FL Vice-Chair: Vacant Members-at-Large: David Matos - GA; Steve Mack - AR Secretary: Christopher Wells – SSEB 2019-2020 Chair: John Williamson - FL Vice-Chair: Alan Goldey - MD David Matos - GA; Steve Mack - AR Members-at-Large: Christopher Wells – SSEB Secretary: 2018-2019 Chair: David Turberville - AL Vice-Chair: John Williamson - FL Members-at-Large: Chuck Flynn - TX; Alan Goldey - MD Secretary: Christopher Wells - SSEB 2017-2018 Chair: Jared Thompson - AR Vice-Chair: David Turberville - AL Members-at-Large: Irene Bennett - GA; Chuck Flynn - TX Secretary: Christopher Wells – SSEB 2016-2017 Chair: David Crowley - NC Vice-Chair: Jared Thompson - AR Members-at-Large: Irene Bennett - GA; David Turberville - AL Secretary: Christopher Wells - SSEB 2015-2016 Chair: Steven Harrison – VA Cindy Becker - FL Vice-Chair: David Crowley - NC; Libby McCaskill - OK Members-at-Large: Christopher Wells – SSEB Secretary: 2014-2015 Chair: Lee Cox – NC Vice-Chair: Steven Harrison – VA Cindy Becker - FL; David Crowley - GA Members-at-Large: Secretary: Christopher Wells – SSEB

2013-2014	Chair: Vice-Chair: Members-at-Large: Secretary:	B.J. Smith – MS Lee Cox – NC Steven Harrison – VA; Cindy Becker - FL Christopher Wells – SSEB
2012-2013	Chair: Vice-Chair: Members-at-Large: Secretary:	Michael Broderick – OK B.J. Smith – MS Lee Cox – NC; Steven Harrison – VA Christopher Wells – SSEB
2011-2012	Chair: Vice-Chair: Members-at-Large: Secretary:	Leslie Foldesi – VA Ann Troxler – LA Michael Broderick – OK; B.J. Smith – MS Christopher Wells – SSEB
2010-2011	Chair: Vice-Chair: Members-at-Large: Secretary:	Mike Stephens – FL Leslie Foldesi – VA Ann Troxler – LA; Michael Broderick – OK Christopher Wells – SSEB
2009-2010	Chair: Vice-Chair: Members-at-Large: Secretary:	Cindy Cardwell – TX Mike Stephens – FL Leslie Foldesi – VA; Ann Troxler – LA Christopher Wells – SSEB
2008-2009	Chair: Vice-Chair: Members-at-Large: Secretary:	Cynthia Sanders – GA Cindy Cardwell – TX Mike Stephens – FL; Leslie Foldesi – VA Christopher Wells – SSEB
2007-2008	Chair: Vice-Chair: Members-at-Large: Secretary:	Ann Troxler – LA Mike Stephens – FL Beverly Hall – NC; Cindy Cardwell – TX Christopher Wells – SSEB
2006-2007	Chair: Vice-Chair: Members-at-Large: Secretary:	Kim Wiebeck – AR Mike Stephens – FL Ann Troxler – LA; Henry Porter – SC Christopher Wells – SSEB
2005-2006	Chair: Vice-Chair: Members-at-Large: Secretary:	Alice Rogers – TX Edward Nanney – TN Mike Stephens – FL; Kim Wiebeck – AR Christopher Wells – SSEB
2004-2005	Chair: Vice-Chair: Members-at-Large: Secretary:	Michael Henry – LA Bob Goff – MS Cynthia Sanders – GA; Alice Rogers – TX Christopher Wells – SSEB
2003-2004	Chair: Vice-Chair: Members-at-Large: Secretary:	Beverly Hall – NC Ruth McBurney – TX Mike Henry – LA; Mike Stephens – FL Christopher Wells – SSEB

2002-2003	Chair: Vice-Chair: Members-at-Large: Secretary:	Pamela Bishop – OK Bill Passetti – FL Henry Porter – SC; David Walter – AL Christopher Wells – SSEB
2001-2002	Chair: Vice-Chair: Members-at-Large: Secretary:	Jared Thompson - AR Pamela Bishop – OK Arthur Tate – TX; Bill Passetti – FL Christopher Wells – SSEB
2000-2001	Chair: Vice-Chair: Members-at-Large: Secretary:	Tom Hill - GA Alice Rogers - TX Kirksey Whatley – AL; Edward Lohr - KY Christopher Wells – SSEB
1999-2000	Chair: Vice-Chair: Members-at-Large: Secretary:	Michael Broderick – OK Jared Thompson - AR Vicki Jeffs – KY, Debra Shults, TN Christopher Wells - SSEB
1998-99	Chair: Vice-Chair: Members-at-Large: Secretary:	Richard Ratliff - TX Tom Hill - GA Michael Broderick - OK; Pearce O'Kelly - SC Christopher Wells - SSEB
1997-98	Chair: Vice-Chair: Members-at-Large: Secretary:	Bob Goff - MS Ruth McBurney - TX Tom Hill - GA, Kirksey Whatley - AL Beth Fulmer - SSEB
1996-97	Chair: Vice-Chair: Members-at-Large: Secretary:	Bill Passetti - FL Alice Rogers - TX Max Batavia - SC, Lawrence Nanney - TN Beth Fulmer - SSEB
1995-96	Chair: Vice-Chair: Members-at-Large: Secretary:	Vicki Jeffs - KY Bill Passetti - FL Eddie Fuente - MS, Alice Rogers - TX Beth Fulmer - SSEB
1994-95	Chair: Vice-Chair: Members-at-Large: Secretary:	Robin Haden - NC Vicki Jeffs - KY Bill Passetti - FL, Eddie Fuente - MS Beth Fulmer - SSEB
1993-94	Chair: Vice-Chair: Members-at-Large: Secretary:	Robin Haden - NC Vicki Jeffs - KY Bill Passetti - FL, Bob Goff - MS Beth Fulmer - SSEB
1992-93	Chair: Vice-Chair: Members-at-Large: Secretary:	Kirk Whatley - AL Greta Dicus - AR Hall Bohlinger - LA, Robin Haden - NC Beth McClelland - SSEB

1991-92	Chair: Vice-Chair: Members-at-Large: Secretary:	Leslie Foldesi - VA Dayne Brown - NC Eddie Fuente - MS, Don Hughes - KY Beth McClelland - SSEB
1990-91	Chair: Vice-Chair: Members-at-Large: Secretary:	Mary Clark - FL Aubrey V. Godwin - AL Dayne Brown - NC, Heyward Shealy - SC Alex Thrower - SSEB
1989-90	Chair: Vice-Chair: Members-at-Large: Secretary:	Thomas Hill - GA Donald Hughes - KY Mary Clark - FL, Dayne Brown - NC Jill Paukert - SSEB
1988-89	Chair: Vice-Chair: Members-at-Large: Secretary:	Eddie Fuente - MS Donald Hughes - KY Lyle Jerrett - FL , Dayne Brown - NC Jill Paukert - SSEB
1987-88	Chair: Vice-Chair: Members-at-Large: Secretary:	Greta Dicus - AR Donald Hughes - KY Lyle Jerrett - FL, Dayne Brown - NC Jill Paukert - SSEB
1986-87	Chair: Vice-Chair: Members-at-Large: Secretary:	Lyle Jerrett - FL Donald Hughes - KY Heyward Shealy - SC, Dayne Brown - NC Jill Paukert - SSEB
1985-86	Chair: Vice-Chair: Members-at-Large: Secretary:	Lyle Jerrett - FL Donald Hughes - KY Heyward Shealy - SC, Dayne Brown - NC Jill Paukert - SSEB
1984-85	Chair: Vice-Chair: Members-at-Large: Secretary:	Bobby Rutledge - GA Lyle Jerrett - FL Bill Aaroe - WV, Ken Miller - MO Scott Fellows - SSEB
1983-84	Chair: Vice-Chair: Members-at-Large: Secretary:	Mike Mobley - TN Cecil Brown - NC Robert Craig - OK, Jim McNees - AL Scott Fellows - SSEB
1982-83	Chair: Vice-Chair: Members-at-Large: Secretary:	Mike Mobley - TN Cecil Brown - NC Robert Craig - OK, Jim McNees - AL Scott Fellows - SSEB
1981-82	Chair: Vice-Chair: Members-at-Large: Secretary:	Bill Spell - LA Al Gooden - GA Don Hughes - KY, Eddie Fuente - MS Scott Fellows - SSEB

1980-81	Chair: Vice-Chair: Members-at-Large: Secretary:	Bill Graham - TN Aubrey Godwin - AL Cecil Brown - NC, Bill Spell - LA Scott Fellows - SSEB
1979-80	Chair: Vice-Chair: Members-at-Large: Secretary:	Gary McNutt - MO Bill Graham - TN Ed Bailey - TX, Chuck Hardin - KY Scott Fellows - SSEB
1978-79	Chair: Vice-Chair: Members-at-Large: Secretary:	Dayne Brown - NC David Lacker - TX Chuck Tedford - GA, Chuck Hardin - KY Scott Fellows - SSEB
1977-78	Chair: Vice-Chair: Secretary:	David Snelling - AR Chuck Hardin - KY Scott Fellows - SSEB
1976-77	Chair: Vice-Chair: Secretary:	Jim Porter - LA David Snelling - AR Scott Fellows - SSEB
1975-76	Chair: Vice-Chair: Secretary:	Aubrey Godwin - AL Jim Porter - LA Scott Fellows - SSEB

SMRAP Activation Procedure

Requesting State

Radiation Control Program

To initiate a request for SMRAP assistance from a participating state, the radiation control program personnel determine that assistance is needed and submit a request through channels to the requesting governor's office.

Initial contacts are expected to be made by telephone to expedite actions. The request for SMRAP assistance should include the following information:

- 1. description of problem;
- 2. type of resources needed;
- 3. where resources should be delivered; and
- 4. what state(s) has the resources.

Concurrent with above actions, informal telephone communication with radiation control program personnel in participating states is encouraged for the purpose of alerting them to the problem and for obtaining any technical information that will be of use in resolving the problem.

Governor's Office

Upon concurrence with the need assessment, as requested by the radiation control program personnel, the requesting governor (office) contacts the responding governor (office) and requests the specified SMRAP assistance.

Responding State

Governor's Office

The responding governor (office) agrees to provide SMRAP assistance and authorizes, through channels, the requested resources to be dispatched to the requesting state. Initial contacts are expected to be made by telephone to expedite actions.

Radiation Control Program

Personnel in the radiation control program, upon a telephone alert from the state's radiation control program, should anticipate the responding governor's (office) authorization to dispatch requested resources to the requesting governor's state.

Upon receipt of the responding governor's authorization to provide SMRAP assistance, the radiation control program should be prepared to expedite response to the assistance request.

Additional information required from the Radiation Control Program in the requesting state will include:

- 1. clear direction on where to meet or deliver the resources;
- 2. estimated time the resources are needed; and
- 3. if the resources include people, what arrangements have been made for housing, etc.

SMRAP Key Contacts

This chapter lists key personnel in the states and federal agencies involved in activating and implementing emergency assistance under SMRAP. Included are:

- 1. the address and phone number of each state governor and the date each term ends;
- 2. the name, address and phone number of the emergency services director in each state;
- 3. the name, address and phone number of the health services director in each state;
- 4. the name, address and phone number of each governor's designee for receiving advance notification of high-level radioactive waste shipments; and
- 5. emergency assistance teams to be contacted in the event of a radiological incident.

In addition, contact information is provided for the U.S. Department of Energy, the U.S. Environmental Protection Agency, the Federal Emergency Management Agency, the U.S. Nuclear Regulatory Commission and the Tennessee Valley Authority.

This chapter also includes specific state resource information on quantity, types and location of survey as well as analytical and communications equipment. Since not all states have the same equipment and analytical capabilities, this data is useful to states as they look to the other SMRAP states for specific types of emergency response support.

Alabama

Governor

The Honorable Kay Ivey (Term ends January 2027) State Capitol Montgomery, Alabama 36130 (334) 242-7100

Emergency Services

The Alabama Emergency Management Agency (AEMA) is responsible for the preparation and implementation of a comprehensive emergency operations plan to cope with emergencies and disasters. Coordination of emergencies is conducted through the State Emergency Operations Center and/or a mobile command post. In the area of radiological emergency response, AEMA works jointly with the Department of Public Health, Office of Radiation Control and other agencies to coordinate federal, state and local response activities and a public information program.

Jeff Smitherman, Director Alabama Emergency Management Agency P.O. Drawer 2160 Clanton, Alabama 35045-2160 (205) 280-2201 (Duty hours) (800) 843-0699 (Non-duty hours)

Health Services

The Alabama Department of Public Health (ADPH) has the mission to protect the public health and safety from excess exposure to ionizing radiation. ADPH is the administrative agency for the State Board of Health, which manages the agreement state program and is the designated radiation control agency. The board is authorized to issue rules and regulations on radioactive materials transportation and may inspect waste shipments. The State Health Officer is the director of the Department of Public Health. As head of the state radiation control agency, the State Health Officer is responsible for issuing orders, declaring emergencies and directing protective actions for radiological emergencies and/or incidents.

Operational responsibilities include determination of protective actions and performance of off-site radiation monitoring and control activities. The department handles all technical aspects of radiation in an emergency and will provide medical support to local governments.

Scott Harris, M.D., M.P.H. State Health Officer The Alabama Department of Public Health The RSA Tower, Suite 1552 P.O. Box 303017 Montgomery, Alabama 36130-3017 (334) 206-5200

Designee for Advance Notification of Shipments

Jeff Smitherman, Director Alabama Emergency Management Agency P.O. Drawer 2160 Clanton, Alabama 35045-2160 (205) 280-2201 (Duty hours) (800) 843-0699 (Non-duty hours)

Radiological Emergency Assistance Contacts

Alabama Department of Public Health

(800) 843-0699 State EOC Communication

Office of Radiation Control Administrative Annex 208 Legends Court Prattville, Alabama 36066 P.O. Box 303017 Montgomery, Alabama 36130-3017

(334) 324-0076 (Radiation Control Duty Officer)
(334) 290-6244 (Work)
(334) 285-9342 (Fax)

Emergency Team Members

Name	Title	Off-Duty Phone & Pager Numbers
Coan, Cason	Director Office of Radiation Control	ph: (334) 290-6250 cell: (334) 320-3457
Swindall, Nick	Assistant Director Office of Radiation Control	ph: (334) 290-6248 cell: (334) 322-8397
McCallum, Undria	Director, Licensing and Registration	ph: (334) 290-6247 cell: (334) 296-2105
Sullivan, Paul	Director, X-Ray Compliance	ph: (334) 290-6287 cell: (334) 320-2142
Coleman, Jerome	Director, Emergency Planning & Environmental Monitoring	ph: (334) 290-6258 cell: (334) 223-3678
VACANT	Director, Radioactive Materials Compliance	ph: cell:

(After hours, and on weekends, assistance should be initiated through the Radiation Control Duty Officer)

In addition to the Radiation Physicists on the Emergency Team (remove Members) listed above, the following positions comprise the remainder of the Emergency Response Team:

Radiation Physicists	12 individuals
Environmentalists	18 individuals
Nurses	18 individuals
Administrative	2 individuals
IT Support	3 individuals

Laboratory and Analytical Programs

Type of Sample	Type of Analysis	Major Equipment
Air	Gross Beta	Canberra Alpha-Beta 2404
Fish	Gamma Analysis	Canberra Series 90 Int. Germanium
Low-Level Gamma		Canberra Series 90 Int. Germanium
Milk	Strontium-89, 90 Gamma Analysis Iodine-131 Barium- 140 Cesium-137 Potassium-40	Canberra Series 90 Int. Germanium Canberra Alpha-Beta
Soil	Gamma Analysis	Canberra Series 90 Int. Germanium
Vegetation	Gamma Analysis	Canberra Series 90 Int. Germanium
Water	Gamma Spectrum Gross Beta	Canberra Series 90 Int. Germanium Canberra Alpha-Beta

(a portable Canberra Series 10 is also available)

Field Equipment (Average Inventory)

Ludlum Model 14C Survey Meters	47
Ludlum Portable Monitors Model 51-1-1	2
Ludlum Portable Monitor Vehicle Adapter	1
Portable Air Samplers	18
Thermo Radioisotope Identifier	2
Fluke Pressurized Ion Chamber 451P-RYR	4
RadEye Alarming/Rate Dosimeters	36
Pocket Dosimeters (200mR, 5R, 100R)	300
Ludlum Survey Wand Model 193-6	1
Ludlum Model 26 Survey Meter	12
Emergency Response Trailer (12 Foot)	1
Ludlum Ion Chamber 9DP	6
Lighting System 9450	2

Arkansas

Governor

The Honorable Sarah Huckabee Sanders (Term ends January 2027) State Capitol Little Rock, Arkansas 72201 (501) 682-2345

Emergency Services

The Arkansas Division of Emergency Management (ADEM) is Arkansas' Homeland Security and Preparedness Agency, ADEM serves as the state's coordination center for all five (5) stages of emergency management: protection, prevention, response, recovery, and mitigation.

The Director is appointed by the Governor, and the office maintains the Arkansas Comprehensive Emergency Management Plan.

The State Emergency Operations Center, located at Camp Robinson, North Little Rock Arkansas, operates constantly. In the event of an emergency, the state is divided into five (5) operational areas with an area coordinator for each. The area coordinators serve a liaison function among the ADEM Director, Local Emergency Planning Committees and county and municipal governments.

A.J. Gary Director and Homeland Security Advisor Arkansas Division of Emergency Management Camp Joseph T. Robinson Building 9501 North Little Rock, Arkansas 72199 (501) 683-6700

Health Services

In an emergency, the Arkansas Department of Health's primary responsibilities are: health and medical assistance; water and sanitation inspection; recovery, identification, and disposal of fatalities; vector control; radiological incident response; and maintenance of state-owned radiological equipment. In the specific area of radiological incident response, the Department of Health is in charge of technical evaluation and assessment, and the issuance of guidelines and protective action advisories.

Jose' R. Romero, MD Secretary of Health Arkansas Department of Health 4815 West Markham Street, Slot #39 Little Rock, Arkansas 72205 (501) 661-2400

Designee for Advance Notification of 10 CFR Parts 37, 71 and 73 Shipments

Bernard Bevill Radiation Control Section Chief Arkansas Department of Health 4815 West Markham Street, Slot #30 Little Rock, Arkansas 72205 (501) 661-2301 Office (501) 661-2136 24-Hours (501) 661-2849 Fax

Radiological Emergency Assistance Contacts

Arkansas Division of(501) 683-6700 24-HoursEmergency Management(800) 322-4012 Emergency Reporting OnlyCamp Joseph T. RobinsonBuilding 9501North Little Rock, Arkansas 721991

Arkansas Department of Health(501) 661-2136 24-Hour Communications CenterRadiation Control Section(800) 633-1735 24-Hour Communications Center4815 West Markham Street, Slot #30Little Rock, Arkansas 72205

Emergency Team Members

Name	Title	Off-Duty Phone
Bevill, Bernard Woodland, Elizabeth	Section Chief, Radiation Control Branch Chief, Preparedness & Emergency Response	(501) 661-2136 (501) 661-2136
VACANT	Program Supervisor, X-Ray & Mammography Program, Radiation Control	(501) 661-2136
VACANT	Program Manager, Radioactive Materials Program, Radiation Control	(501) 661-2136
Romero, R., Jose'	Secretary of Health, MD, Arkansas Department of Health	(501) 661-2136

In addition to the Emergency Team Members listed above, the following positions comprise the remainder of the Radiological Emergency Response Team:

Health Physicists	13 individuals
Administrative/Clerical	10 individuals
Electronics Technicians	2 individuals
Public Information	9 individuals
Radiochemistry	4 individuals
Communication Specialists	6 individuals
Program Managers	5 individuals

Additional logistical and radiation monitoring support is available from other Arkansas Department of Health resources.

Laboratory and Analytical Programs

Major Equipment

Type of Sample

1. Perkin Elmer 4810 TR liquid scintillation analyzer with printouts.

Type of Analysis

2. Apex-Gamma Gamma Spectroscopy System consisting of an MCA, with two Canberra HPGe Detectors and associated software, hardware and shielding.

Equipment Used

- 3. Canberra LB4200 Gas Flow Proportional Alpha-Beta Counter with sixteen (16) twoinch detectors for simultaneous counting
- 4. Agilent 7500i Series Inductively Coupled Plasma Mass Spectroscopy (ICP/MS) System

Air	Gross Alpha, Gross Beta	3
	Gamma	2
Charcoal Filter	Gamma	2
Fish	Gamma	2
Soil and Silt	Gamma	2
Vegetation	Gamma	2
Water	Gross Alpha/Beta	3
	Ra-226/228	2,3
	Uranium	4
	Low energy betas	1
Wipes	Gross Alpha/Beta	3
	Gamma	2
	Low energy betas	1

Field Equipment (Average Inventory)

- 16 Ludlum Model 3 Survey Meters with 44-6 detector probe4 Ludlum Model 3 Survey Meters with 44-2 detector probe2 Ludlum Model 3 Survey Meters with 43-5 detector probe
 - 1 FLIR NanoRaider
 - 1 Berkeley Nucleonics Corporation SAM 945G
 - 1 Ludlum Model 12-4 Neutron Dose Rate Meter
- 12 Ludlum Model 19 Micro R Meters
- 8 Ludlum Model 2241-3RK Radiation Detection Emergency Kits with 44-2, 44-9, 133-6 or 133-7, and 44-38 detectors (scaler/ratemeter)
 - 1 Ludlum Model 2241-3RK Radiation Detection Emergency Kit with 44-2, 44-3,
 - 44-9, 133-6, and 44-38 detectors (scaler/ratemeter)
 - 4 Victoreen Model 451-P
 - 3 Victoreen Model 451-B
- 8 RADeCO Model H-809C Air Samplers
- 2 RADeCO Model H-811 Air Samplers
- 6 Vehicles equipped with other miscellaneous emergency response equipment and 2 communications systems: Arkansas Department of Health radios and Arkansas Wireless Information Network (AWIN) radios
 - 37 RAD-60R Personal Dosimeters

Florida

Governor

The Honorable Ron DeSantis (Term ends January 2027) State Capitol Tallahassee, Florida 32301 (850) 488-4441

Emergency Services

The Division of Emergency Management in the Office of the Governor is responsible for preparing and implementing a comprehensive program to meet disasters and emergencies. In the area of radiological emergency response, the division maintains a plan for nuclear power plant emergencies; provides assistance in the preparation of local plans; coordinates federal, state and local response activities; activates a state emergency operations center; and manages a public information program.

Kevin Guthrie, Director Division of Emergency Management Office of the Governor 2555 Shumard Oak Boulevard Tallahassee, Florida 32399 (850) 413-9969 (Direct) or (850) 815- 4000

Health Services

The Florida Radiation Protection Act designates the Department of Health as the lead agency for radiation safety. The department also administers the agreement state program. The act was amended in 1984 to require the department to protect the environment, as well as the public, from harmful radiation effects. Therefore, the department also undertakes environmental surveillance activities.

Dr. Shamarial Roberson Deputy Secretary for Health Department of Health 4052 Bald Cypress Way Tallahassee, Florida 32399-1741 (850) 245-4245
Designee for Advance Notification of Shipments

John Williamson Environmental Administrator Bureau of Radiation Control Florida Department of Health P.O. Box 680069 Orlando, Florida 32868-0069 (407) 297-2095 Fax (407) 297-2085 Email: john.williamson@flhealth.gov

Radiological Emergency Assistance Contacts

Cynthia Becker Bureau of Radiation Control Department of Health, Bin C21 4052 Bald Cypress Way Tallahassee, Florida 32399-1741 Email: cindy.becker@flhealth.gov

**Orlando Office

Phone: (850) 245-4266 Fax: (850) 487-0435

(407) 297-2095 (24-hour)

Emergency Team Members

Name	Title	Off-Duty Phone
Becker, Cynthia	Chief, Bureau of Radiation Control	(850) 245-4266 (O) (850) 251-7522 (C)
Williamson, John	Administrator of Environmental Radiation Control Program	(407) 297-2095 (O) (407) 389-0213 (H) (850) 528-4151 (C)
Kunder, Kevin	Administrator of Radioactive Materials Program	(850) 245-4545 (O) (386) 679-8617 (850) 528-6032 (C)
Seidensticker, Mark	Manager of Emergency Response Program	(407) 297-2095 (O) (352) 978-0017 (H) (850) 528-1213 (C)

Laboratory and Analytical Programs

Type of Sample	Analysis	Equipment Used
Air (particulate	Gross Alpha, Gross Beta (filter)	1, 2
filter and	Gamma Analysis (filter + cartridge)	3
radioiodine	Isotopic Uranium by specific chemistry (filter)	6
cartridge)	Isotopic Plutonium by specific chemistry (filter)	6
3 /	Strontium 89/90 by specific chemistry	1, 2
Swipes	Gross Alpha, Gross Beta	1, 2
	Strontium-89, 90 by specific chemistry	1, 2
	Gamma Analysis	3
	Isotopic Uranium by specific chemistry	6
	Isotopic Plutonium by specific chemistry	6
	Tritium, Carbon-14	7,8
	Nickel-63 by specific chemistry	7
	Promethium-147 by specific chemistry	7
Fauna	Gamma Analysis	3
Food	Gamma Analysis	3
	Isotopic Plutonium	6
Milk	Strontium-89, 90 by specific chemistry,	1, 2
	I-131 by specific chemistry,	1, 2
	Gamma Analysis	3
Soil	Gamma Analysis	3
	Radium-226 by ingrowth of daughters	4
	Tritium, Carbon-14	7,8
Vegetation	Gamma Analysis	3
	Strontium 89/90 by specific chemistry	1, 2
	Isotopic Uranium by specific chemistry	6
	Isotopic Plutonium by specific chemistry	6
Water	Gross Alpha, Gross Beta	1,2
	Radium-226, Radium-228, Polonium-210, Total	1,2
	Uranium, Strontium-89, 90 all by specific	
	chemistry	
	Gamma Analysis	3
	Isotopic Uranium by specific chemistry	5,6
	Isotopic Plutonium by specific chemistry	5,6
	Polonium-210 by specific chemistry	5
	Tritium, Carbon-14	7
	Radon-222	7
	Nickel-63 by specific chemistry	7
	Promethium-147 by specific chemistry	7

Major Laboratory Equipment:

- 1 (2) low background, gas flow proportional counters with automatic sample changers consisting of two Protean WPC-1050's.
- 2. (2) Eight-Detector, low background, gas flow, proportional counter systems consisting of (2) Protean MDS-8.
- Gamma Spectroscopy system consisting of Canberra N type 65% ultra-low background HPGE detector, Ortec N type 50% low background HPGE detector, Canberra N type 50% HPGE detector, one Ludium shielded 2" Nai well counter, and Canberra Genie 2000 PC analysis software.
- 4. Gamma Spectroscopy system consisting of two 3 x 3 NaI and two 4 x 4 NaI detectors, with Canberra Genie 2K.
- 5. (2) Ordela PERALS[®] (Photon Electron Rejecting Alpha Liquid Spectroscopy) spectrometers.
- 6. (3) Canberra 7401 alpha spectroscopy chambers with PIPS detectors.
- 7. Perkin Elmer Tri Carb 4910TR Liquid scintillation analyzer.
- 8. Packard Model 307 Sample Oxidizer for preparation of solid samples for H3/C14 analysis.
- 9. Thermoluminescent dosimetry system consisting of Panasonic Model 716 automatic TLD reader, 500 Panasonic 814 TLD badges.

Emergency Vehicles:

Mobile Laboratory (mounted on 2005 International 4300 Diesel Chassis) complete with:

A.C. Generator (10 KW)

Gamma spectroscopy system consisting of Canberra N type 65% ultra-low background HPGE detector, Canberra P type 30% HPGE detector, with Canberra Genie 2000 PC analysis software and shield capacities of 3.5 L and 1.0 L Marinelli containers, respectively.

Gamma Products Traveler gas flow proportional counter with sample changer.

Canberra iSolo portable alpha beta counter with radon/thoron rejection

Triathler portable liquid scintillation counter

- (2) Ortec Detective EX-100 portable HPGE gamma radioisotope identifier systems with neutron detection.
- (9) ADM-300A with beta/gamma detector, 0-10,000 R/hr
- (3) ADM-300A Type C kit with beta/gamma detector, X-ray probe (for Pu detection) and GM pancake probe and alpha probe.
- (7) Ludlum 2241 with GM Pancake Probe, 0-999,999 cpm
- (2) Eberline ASP-1 with GM Pancake Probe, 0-3,600,000 cpm
- (2) Ludlum Model 3 with alpha scintillators, 0-500,000 cpm
- (2) Ludlum Model 177 area monitor.
- (4) Ludlum Model 26-1 GM Pancake Probe, 0-999,999 cpm
- (4) F & J Specialty Products self-contained battery powered Low-Vol Air Samplers
- Self-Reading Pocket Dosimeters with Chargers: (40) 0-200 mR, (14) 0-5 R, (25) Thermo EPD Mark 2 Electronic personnel dosimeters
- (1) Ludlum Model 52 portal monitor.
- (11) Canberra Model 213 Ultra Radiacs

Sample Preparation Vehicle

This is a converted 2011 GMC Savana 3500 Cargo Van, with trailering capability. It has laboratory benchtop space and equipment to prepare air particulates and radioiodine filters, water, soil and swipes in the field. In addition to laboratory space, decontamination of sampling equipment can also be accomplished.

Sampling Vehicles (Orlando Facility)

(1) 2021 Dodge Durango with trailering capability, GPS, and satellite comm.
 (1) 2020 Ford F-150 4x2 Crew Cab P/U with GPS, and satellite comm.
 (1) 2019 Ford F-250 4x2 Crew Cab P/U with trailering capability, GPS, and satellite comm.
 (1) 2018 Chevy 1500 4 x 4 Crew Cab P/U with trailering capability, GPS, and satellite (1)
 (1) 2017 GMC Sierra 2500 4x4 Crew Cab with trailering capability, GPS, and satellite comm.
 (1) 2012 Ford F-150 4x 2 Crew Cab P/U with trailering capability, GPS, and satellite comm.
 (1) 2012 Ford F-150 4x 2 Crew Cab P/U with trailering capability, GPS and satellite comm.
 (2020 Intimidator XUV Classic 4 x 4 ATV
 2015 Intimidator XUV Classic 4 x 4 ATV

2008 EZ Go ST 2x2 Golf Cart

Cargo/Equipment Issue Trailers (Orlando Facility)

Wells Cargo 16' x 8' V front Express Wagon dual axel cargo trailer with A/C Wells Cargo 16' x 7' Express Wagon dual axel cargo trailer with A/C and 7.5 KW generator Wells Cargo 12' x 6' V front dual axel cargo trailer with A/C. Wells Cargo 5' x 8'cargo trailer 5' x 10' open utility trailer 20' x 7' auto hauler trailer

Additional Surveying, Monitoring and Sampling Equipment

(located at the Orlando Facility)

- (7) Far West Technology REM 500 neutron rate meter.
- (3) IcX Identifinder Ultra LaBr₃ radioisotopic identifier system with neutron detection
- (6) Johnson AM-801 portal monitors
- (12) Johnson DSM-525 Emergency Response Kits with beta gamma pancake and 1x1 Nal.
- (6) Bladewerx Saber BPM FL-6 Continuous Air Monitors
- (2) Ludlum Model 52 portal monitor
- (9) Ludlum Model 2401-S Gamma Scintillators
- (12) Ludlum Model 2401-P beta gamma pancake
- (10) Canberra Model 213 Ultra Radiacs
- (3) Ludlum Model 19 micro R meters
- (8) High volume Air pumps

There are Radiation Control Inspectors located in the following regional areas:

Ft. Myers (3 inspectors) Lantana (5 inspectors) Miami (7 inspectors) Jacksonville (5 inspectors) Orlando (4 inspectors) Pensacola (1 inspector) Tallahassee (1 inspector) co-located with HQ. Tampa (6 inspectors) Each inspector has an emergency kit that contains Thermo RadEye PRD Alarming Personal Radiation Detector Ludlum Model 2401-P beta gamma pancake Canberra Model 213 Ultra Radiac Thermo EPD Mark 2 Electronic personnel dosimeter

Additional Surveying and Monitoring Equipment

- (1) Canberra InSpector 1000 LaBr₃ radioisotopic identifier system with neutron detection (Pensacola)
- (6) IcX Identifinder Ultra LaBr₃ radioisotopic identifier system with neutron detection (one each in Ft. Myers, Lantana, Miami, Jacksonville, Tally HQ, Tampa)
- (1) Ortec Detective EX-100 portable HPGE gamma radioisotope identifier system with neutron detection (Tally HQ)
- (1) Ortec Detective EX portable HPGE gamma radioisotope identifier system with neutron detection (Miami)
- (7) Far West Technology REM 500 neutron rate meter (one each in Ft. Myers, Lantana, Miami, Jacksonville, Pensacola, Tally HQ, Tampa)
- (6) Johnson AM-801 portal monitors (one each in Ft. Myers, Lantana, Miami, Orange Park, Tally HQ, Tampa)
- (6) Bladewerx Saber BPM FL-6 Continuous Air Monitors (one each in Ft. Myers, Lantana, Miami, Jacksonville, Tally HQ, Tampa)
- (12) Johnson DSM-525 Emergency Response Kits with beta gamma pancake and 1x1 Nal. (two each in Ft. Myers, Lantana, Miami, Jacksonville, Tally HQ, Tampa)

(1) Ludlum Model 52 portal monitor (Tallahassee HQ)

(26) Ludlum Model 3 with alpha scintillator probe. (Distributed throughout regional areas)

Georgia

Governor

The Honorable Brian Kemp (Term ends January 2027) State Capitol Atlanta, Georgia 30334 (404) 656-1776

Emergency Services

The Georgia Emergency Management and Homeland Security Agency (GEMA/HS) prepares and implements the state's Emergency Management Program. During a radiological emergency, the agency can provide communications with state or local agencies from the state emergency operations center and/or a near-site operations center. It will also assist with the response effort by coordinating with various agencies to: activate evacuation procedures; provide information to the public; and obtain additional personnel and equipment.

James Stallings	Shelby Bergmann
Director,	Program Manager
Georgia Emergency Management and	Radiological Emergency
Homeland Security Agency	Preparedness
P.O. Box 18055	Georgia Emergency Management and
Atlanta, Georgia 30316	Homeland Security Agency
(404) 635-7000	P.O. Box 18055
	Atlanta, Georgia 30316
	(404) 635-7292
	(404) 825-6723

The Georgia Department of Natural Resources (DNR) is the lead state agency for response to radiological incidents in or affecting the State of Georgia. DNR provides technical expertise and advice to state and local government officials on measures necessary to protect citizens and to mitigate the effects of a radiological incident.

The Georgia Department of Natural Resources (DNR), the Georgia Department of Transportation (DOT) and the Georgia Emergency Management Agency (GEMA) have a joint communications center. This center is manned 24 hours a day. Upon receipt of a call reporting a radiological emergency, joint communications center staff directly notify the Environmental Radiation Program Manager by telephone.

Jeffrey W. Cown, Director Georgia Dept. of Natural Resources Environmental Protection Division Floyd Towers East, Suite 1456 2 Martin Luther King Jr. Drive Atlanta, Georgia 30334-9000 (404) 656-4713 John Eunice, Deputy Director Georgia Dept. of Natural Resources Environmental Protection Division Floyd Towers East, Suite 1456 2 Martin Luther King Jr. Drive Atlanta, Georgia 30334-9000 (404) 656-4713 Dr. James Boylan, Chief Georgia Department of Natural Resources Environmental Protection Division Air Protection Branch 4244 International Parkway, Suite 120 Atlanta, Georgia 30354 (404) 363-7000 james.boylan@dnr.ga.gov

Dave Matos, Program Manager Georgia Department of Natural Resources Environmental Protection Division Radiation Programs Air Protection Branch 4244 International Pkwy., Ste. 120 Atlanta, Georgia 30354 (404) 362-2675 david.matos@dnr.ga.gov

Designee for Advance Notification of Shipments

Sergeant First Class Stephen Burnham Georgia Department of Public Safety Motor Carrier Compliance Division

959 United Avenue, S.E. Atlanta, Georgia 30316 (470) 591-9332 (770) 359-3302 fax Email: srburnham@gsp.net

Radiological Emergency Assistance Contacts

DNR/GEMA/DOT Communications Center

(800) 241-4113 (24 Hours) (404) 635-7200

Georgia Department of Natural Resources Environmental Protection Division Environmental Radiation Program (404) 363-7000 (8 a.m. - 4:30 p.m.)

Emergency Team Members

Name	Title	Off-Duty Phone
Shelly Stancil	Environmental Radiation Program	470-606-4734

* The preferred method of contacting the Emergency Team Members during non-duty hours is to call the 24-hour warning point.

Type of Sample	Type of Analysis	Major Equipment
Air (filters/	Gamma Spectrum,	See List Below
cartridges)	I-131/Cs-137	
	Gross alpha/beta,	
	Tritium	
Milk	Gamma Spectrum	
Soil	Gamma Spectrum	
Sediment	Gamma Spectrum	
Vegetation	Gamma Spectrum	
Water	Gross alpha/beta	
	Radioiodine, Tritium	

Laboratory and Analytical Programs (DNR)

Routine laboratory analysis of environmental samples is conducted in the Mobile Radiation Laboratory (MRL), a 40-foot motor trailer pulled by a "dually" pick-up truck, which is used for emergency response activities and on-site inspections. Major equipment items in this laboratory are listed below.

I. Alpha/Beta Counter:

Gamma Products Automatic Alpha/Beta Counter

II. Liquid Scintillation Counter: Packard Tri-Carb 2500TR/AB Liquid Scintillation Counter*

III. High-Resolution Gamma Spectrometer Systems:

- A) Gamma Detectors Canberra 15% MAC HpGe in Low-Background Shield
- B) Gamma Multi-Channel Analyzers: Canberra GENIE AXP Gamma Spectral Analysis System*

IV. Computer Resources & Data Management: The Mobile Lab computational and data entry workstation is a single stand-alone version of the network used in (A) above. However, this unit also functions as a remote link to the network described to facilitate exchanges as needed.

V. Primary Radiological Emergency Response Vehicles:

A) 2 - 2022 F-150 Crew Cab 4WD Pickup

- B) 1 2008 Ford F-250 Crew Cab 4WD Pickup
- C) 6 Ford Explorers with vehicle mounted Gamma and neutron (MCCD)
- D) 1 2010 Ford F-550 Crew Cab Dual Rear Wheel Pickup Truck (used to pull Mobile Radiation Laboratory)
 - Note:

Air and water transportation are available through the Law Enforcement section of the DNR Wildlife Resources Division (WRD).

VI. Portable Equipment

- A) Air Sampling Equipment (battery, AC and gasoline operated)
- B) Survey Meters (ion chamber, GM, alpha, beta, micro-R and neutron)
- C) Dosimetry (direct reading pocket, digital alarming)
- D) Protective Clothing (coveralls, boots, gloves, etc.)
- E) Tritium "Sniffer"
- F) Laptop Computers
- G) 4 Southern Link Portable 800MHz Radios, 1 Southern Link Base Radio with access to additional units within the division. GEMA and the Georgia Department of Public Safety also use this radio system.
- H) Portable Radionuclide Identifiers (Thermo identiFINDER (3), Exploranium GR-135 (2))
- I) GPS units (hand-held)
- J) 6 SPRD Gamma and neutron (MCCD)
- K) 2 NRAD drones Gamma and neutron (MCCD)

Kentucky

Governor

The Honorable Andy Beshear (Term ends December 2027) State Capitol Frankfort, Kentucky 40601 (502) 564-2611

Emergency Management

The Division of Disaster and Emergency Management, in the Department of Military Affairs, is headed by the Adjutant General of the Commonwealth of Kentucky. The division is the lead state agency for response planning and coordination. The division's responsibilities include activation of the Emergency Operations Center and Emergency Communications Center, coordination of planning and response with adjacent states, public information dissemination and radiological protection coordination.

Colonel Jeremy Slinker, Director Division of Emergency Management 100 Minuteman Parkway Boone National Guard Center Frankfort, Kentucky 40601 (502) 607-1682

Health Services

The Cabinet for Health & Family Services administers the agreement state program and monitors sites where radioactive materials exist. Within the cabinet, the Radiation Health Branch has primary responsibility for response to peacetime radiological incidents.

Eric Friedlander Cabinet for Health & Family Services 275 East Main Street Frankfort, Kentucky 40621 (502) 564-7130

Designee for Advance Notification of Shipments (10 CFR Parts 71 and 73)

Matt McKinley, Manager Radiation Health Branch Division of Public Health Protection and Safety Department for Public Health

275 East Main Street Mailstop HSICA Frankfort, Kentucky 40621-0001 (502) 564-3700 extension 4181

Radiological Emergency Assistance Contacts

State Police	(502) 695-6300 or 1-800-222-5555
Division of Emergency Management 24-Hour Duty Officer	(502) 607-1638 or (800) 255-2587
Radiation Health Branch Department of Public Health Cabinet for Health & Family Services 275 East Main Street Mail Stop HSICA Frankfort, Kentucky 40621-0001	(502) 564-3700 (8a.m4:30p.m)

Emergency Team Members

Name	Title	Off-Duty Phone	Email Address
McKinley, Matt	Manager	(502) 229-6254 (502) 803-1353	mattheww.mckinley@ky.gov
Marshall, Ashley	Radiation Producing Machines Supervisor	(502) 661-9900 (502) 604-8277	ashley.marshall@ky.gov
Hestand, Russell	Radiation Materials Supervisors	(502) 229-8554 (502) 291-2587	russell.hestand@ky.gov
Brock, Stephanie	Radiation/Environment al Monitoring Section Supervisor	(502) 382-7003 (859) 351-0160	stephaniec.brock@ky.gov
Guy, Tamara	Program Coordinator	(502) 227-2434 (502) 330-7662	tamara.guy@ky.gov

Laboratory and Analytical Programs

Instrument	QTY	Detection/Isotopes	Sample Type
		Cross sinks	
Gas-Flow Proportional Counters (Tennelecs)	4	Gross alpha Gross beta Sr-90 C-14	Liquids (evaporated) Air filters Swipes
Mirion Canberra		Ra-228 (Ac-228)	
Liquid Scintillation Counters (Tri- Carb)	3	H-3 Tc-99	Liquids Rad Disks (Tc-99) Air Filters (leached) Soils (digested)
Perkin Elmer			
Alpha Chambers (silicon detectors)	36	Pu U Ra-226	Liquids Air Filters (leached) Soils (digested)
Mirion Canberra			
ISOCS (high-purity Ge - HPGe) Gamma Detectors Mirion Canberra	9	Gamma emitters 40 keV – 1836 keV	In-situ soil Liquids Air filters Swipes Soils
iSolos (silicon detectors) Mirion Canberra	5	Gross alpha Gross beta w/radon + thoron	Swipes
Nal Gamma Detectors Mirion Canberra	4	Gamma emitters 40 keV – 1836 keV	Liquids Swipes Air Filters Soils
Triathler Multi-Label Liquid Counters Hidex	2	Beta emitters Gamma emitters	Liquids Swipes Soils

InSpector1000 LaBr Probe Neutron Probe Mirion Canberra	1	Gamma emitters 40 keV – 1836 keV Neutrons	In-situ objects
Microspec Nal detectors w/GPS Bubble –Technologies	3	Gamma emitters	In-situ soil
E-CAMS Mirion Canberra	2	Pu+U+Am/Gross beta	Air
Low volume air sampler F&J Specialty Products	4	Digital air sampler DF-AB-75L-Li Alpha, beta, gamma	Air particulate collection

Survey Meter Inventory

Quantity	Manufacturer	Model	Detection
28	Ludlum	2241	α,β,γ
7	Ludlum	14C	α,β,γ
4	Ludlum	52-1-1	β,γ
1	Ludlum	77-3	γ
18	Canberra	Ultraradiac	γ
3	Thermo	Identifinder	γ,n
2	Thermo	Radiameter	α,β,γ
2	Thermo	RIIDEye	γ,n, dose
1	Thermo	Remball	n
7	Thermo	Alarming Ratemeter	γ,n, dose
		PM 1703 GN	
20	Thermo	SPRD	γ,n, dose
6	Thermo	PackEye	γ,n
18	Thermo	RadEye B20ER	a,β,γ, dose
2	Ortec	Detective X	γ,n
9	RTI	Piranha	x-ray
2	Fluke Victoreen	451 P-RYR	γ
		Pressurized Ion	
		Chamber	
11	Sensor Technology	Radiation Pager	γ
	Engineering		
6	Sensor Technology	HRM	γ,n
	Engineering		

16	Exploranium Radiation Detection Systems	GR-100 Personal Radiation Monitor	γ,n, dose
9	SEI	Radiation Alert Inspectors	α,β,γ

Louisiana

Governor

The Honorable Jeff Landry (Term ends January 2028) State Capitol Baton Rouge, Louisiana 70804 (225) 342-0991 (225) 342-7015 (225) 342-7099 - fax

Emergency Services

The Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP), coordinates and controls emergency operations, as directed by the governor. If warranted by the emergency, the office activates the state's emergency operations and communications centers. The office coordinates the non-technical response to a radiological incident and assists parish governments with their protective measures, planning, and implementation.

Jacques Thibodeaux Director, Governor's Office of Homeland Security and Emergency Preparedness 7667 Independence Boulevard Baton Rouge, Louisiana 70806 (225) 925-7345

Radiation Health and Safety Services

The Louisiana Department of Environmental Quality (LDEQ) administers the state's radiation control law and the Nuclear Regulatory Commission (NRC) Agreement State Program. The Department is headed by the secretary, who is appointed by the governor.

The Louisiana Department of Environmental Quality provides technical guidance and assistance to state and parish governments in the areas of licensing, inspections, accident assessment, protective action recommendations, monitoring, sampling and decontamination. The Radiological Emergency Planning and Response Unit within the Emergency and Radiological Services Division (ERSD) of LDEQ also conducts training programs for state and local emergency response personnel and informs the media and the general public about radiation from fixed nuclear power plants, and other sources.

Chuck Carr Brown, Ph.D Secretary Louisiana Department of Environmental Quality Box 4301 Baton Rouge, Louisiana 70821-4301 (225) 219-3950 (225) 219-3971 - fax

Designee for Advance Notification of Shipments

Captain John Porter Louisiana State Police 7919 Independence Boulevard Baton Rouge, Louisiana 70806 (225) 925-6113

Radiological Emergency Assistance Contacts

Louisiana State Police

Louisiana Department of(225)Environmental Quality(225)Emergency and Radiological Services DivisionRadiological Emergency Planning & ResponseBox 4312Baton Rouge, Louisiana 70821-4312

(225) 925-6595 (24 Hours)

(225) 219-0941 (225) 765-0160 (24 Hours)

Louisiana Governor's Office of Homeland Security (225) 925-7500 (Business Hours Only) and Emergency Preparedness 7667 Independence Boulevard Baton Rouge, Louisiana 70806

LDEQ Emergency Response Members

Name	Title	Contact Information
Blackwell, Richard	Environmental Scientist Supervisor	(225) 219-3639 richard.blackwell@la.gov
Pate, James	Environmental Scientist Staff	(225) 219-3642 james.pate@la.gov
Walker, Jessica	Environmental Scientist Staff	(225) 219-3835 jessica.walker@la.gov
Schexnayder, Brad	Environmental Scientist Supervisor	(225) 219-3625 brad.schexnayder@la.gov
Borne, Kevin	Environmental Scientist Manager	(225) 219-3616 (337) 212-2251 jerry.lang@la.gov
Burgard, Karen	Environmental Scientist Manager	(225) 219-3670 (225) 284-7604 karen.burgard@la.gov
Lang, Jerry	Division Administrator	(225) 219-2966 (225) 910-1260 jerry.lang@la.gov

Analysis and Equipment Information

Type of Sample	Type of Analysis	Major Equipment
Water, Milk, Sediment, Vegetation, Air Filters, Fish, Swipes	Gamma Spectroscopy	High Purity Germanium Detectors and MCA and Analytical Software* Canberra Inspector 1000 SAM 940
Water, Air Filters, Swipes	Gross Beta	Canberra/Tennelec S5E*
Water	Liquid Scintillation	Packard TRI-Carb 2900-TR Model Liquid Scintillation System*
Air Sampling	Beta/Gamma	Ludlum Model 2000 Scaler, Charcoal & Silver Zeolite Filters
Industrial Radiography	Gamma density and soil gauges	Ludlum Model 5's
Contamination Incidents	All	Scintillation Detectors, G-M Survey Ratemeters
Medical X-ray	X- and Gamma	RTI – Piranha Model 557
Nuclear Medicine Radioisotopes	Gamma	Ludlum Model 3, Ludlum Model 14c
Lost Sources	All	Ludlum Model 14c or 3 with Scintillation Probe, GM, or Ionization Chamber to establish exposure rates
NORM	Ambient Gamma	Ludlum Model 19 Micro-R meters
NORM	Ambient Gamma	Ludlum Model 3 with Probe 44-2
Neutron Source	Neutrons	REM BALL
Linear Accelerators	X-and Gamma	Eberline Model PIC-6B Ionization Chamber

*LDEQ Contract Laboratory's Equipment

Mississippi

Governor

The Honorable Tate Reeves (Term ends January 2028) State Capitol Jackson, Mississippi 39205 (601) 359-3150

Emergency Services

The Mississippi Emergency Management Agency (MEMA) prepares and coordinates a state program for emergency management. The agency also issues permits for radioactive waste transportation. The state's "Guidance for Radiological Transportation Emergencies" gives the agency a support role, unless the emergency warrants the use of additional personnel, evacuations or activation of the Mississippi Emergency Management Plan.

Stephen C. McCraney, Executive Director Mississippi Emergency Management Agency (MEMA) P.O. Box 5644 Pearl, Mississippi 39208 (601) 933-6362

Health Services

The Mississippi State Department of Health is the administrative agency for the Board of Health, which implements the state's agreement state program. The Mississippi Radioactive Waste Transportation Act of 1982 requires the Board of Health to develop regulations for transportation permits, fees, pre-notification and emergency response. Emergency response involves technical supervision, site isolation, monitoring and records management.

Thomas Dobbs, MD, MPH State Health Officer Mississippi State Department of Health P.O. Box 1700 Jackson, Mississippi 39215-1700 (601) 576-7634

Designee for Advance Notification of Waste Shipments

Stephen C. McCraney, Executive Director Mississippi Emergency Management Agency (MEMA) P.O. Box 5644 Pearl, Mississippi 39208 (601) 933-6362

Designee for Advance Notification of Part 37 Radioactive Shipments

Ron Rogers, Director of Radiological Health Mississippi State Department of Health 3150 Lawson Street Jackson, Mississippi 39215 (601) 987-6893

Radiological Emergency Assistance Contacts

Mississippi Emergency Management Agency (MEMA) (primary)

	(601) 933-6362 (in Mississippi) (800) 222-6362 (24 Hours)
Division of Radiological Health	(601) 576-8085 (24 Hours)
State Department of Health	(601) 987-6893 (8am - 5pm)
3150 Lawson Street	(601) 987-6887 (Fax)
Jackson, Mississippi 39213	

Emergency Team Members

Name	Title	Off-Duty Phone	Pager and Email Address
Rogers, Ronald	Director, Division of Radiological Health	(601) 813-5787	(601) 813-5787 ronald.rogers@msdh.ms.gov
Clark, James	Deputy Director, Division of Radiological Health	(601) 405-5286	james.clark@msdh.ms.gov
Dunn, Adam	Emergency Response Coordinator, Division of Radiological Health	(601) 443-1987	adam.dunn@msdh.ms.gov
Carson, Jimmy	Health Physicist, Administrative X-Ray Branch	(601) 953-1059	(601) 850-9573 jimmy.carson@msdh.ms.gov
Algee, Jeff	Health Physicist, Administrative Radioactive Materials Branch	(601) 260-2968	(601) 260-2698 jeff.algee@msdh.ms.gov
VACANT	Health Physicist, Administrative Environmental Branch		

In addition to the Emergency Team Members listed above, the following positions comprise the remainder of the Radiological Emergency Response Team:

Health Physicists 9 individuals Administrative/Clerical 1 individuals Radiochemistry 2 individual

The Health Department also has 6 Emergency Response Coordinators that have Thermofisher SPRD Identifiers.

Additional logistical and radiation monitoring support is available from other Department of Health resources.

Type of	Analysis	Major Equipment
Sample		
Air (particulate	Gross Alpha, Beta (filter)	1
filter and	Gamma Analysis (filter + cartridge)	4
radioiodine		
cartridge)		
Direct Radiation	Beta, Gamma	3
Ambient		
Swipes	Gross Alpha, Beta Gamma	1,4
Meat/Fish	Specific Gamma, Gross Alpha, Beta	1,4
Milk	Strontium-89, -90 by specific chemistry	1
	I-131 by Gamma Analysis	4
Soil, Sediment	Gamma analysis	4
Vegetation	Gamma analysis	4
Water	Gross Alpha, Beta, Radium226/228	1
	Strontium-89, -90, Uranium by specific	1
	chemistry,	
	Gamma analysis,	4
	carbon 14, tritium	5,6
	radon-222	6

Major Laboratory Equipment

- 1. (2)-Gamma Products Automatic Alpha/Beta Gas Flow Proportional Counter
- 2. Ametek/Ortec D-Spec PC-Based MCA, Gamma Vision Data Reduction Spectroscopy System
- Ortec HPGe Detector (3) and Ortec Low Energy Detector (1)
- 3. Hidex 300SL Liquid Scintillation System
- 4. Packard Tri-Carb 2900TR Liquid Scintillation Counter

Emergency Vehicles:

- 1. 2006 Ford Excursion 4-Wheel Drive with Satellite Radio, 700 mhz state-wide radio, and Trailer Towing Capability.
- 2. 2004 Chevrolet Suburban 3/4 Ton with Satellite Radio, 700 mhz state-wide radio, and Trailer Towing Capability.
- 3. 2011 Ford 4-wheel Drive Pick-Up with Satellite Radio, 700 mhz state-wide radio, and Trailer Towing Capability.
- 4. Various state-owned vehicles equipped with satellite radios.

Other Equipment

- a. BNC Model 940-2 GN MCA (gamma/neutron) (1)
- b. Exploranium Portable MCA (1)
- c. Survey Meters (ion, alpha, beta, gamma & scintillometer)
 - Ludlum 14-C (11)
 - Ludlum 2241-3 scaler/ratemeters (21)
 - Ludlum 3 (19)
 - Ludlum 19 (microR) (8)
 - Ludlum 15 neutron (1)
 - Ludlum 12 alpha (1)
 - Ludlum 26 & 26-1 (20)
 - Ludlum 193-6 contamination monitor (1)
 - NDS ND-2000 (5)
- d. Dosimetry Equipment (pocket with readers)
- e. Protective Equipment (Tyvek Anti-Cs, gloves, boots/booties, etc.)
- f. Field Chemistry Supplies
- g. Air Samplers w/battery (6)
- h. Thermofisher Portal Monitors (12)
- i. Ludlum Model 25 (10)
- j. Thermofisher RadEye PRD (26)
- k. Ortec Detective Portable Isotope Identifier

Missouri

Governor

The Honorable Michael L. Parson (Term ends January 2025) State Capitol Jefferson City, Missouri 65101 (573) 751-3222

Emergency Services

The State Emergency Management Agency, in the Department of Public Safety is the initial contact point for emergency organizations throughout the state. The agency coordinates the Missouri Nuclear Power Plant Accident Plan and is responsible for notifications to response partners regarding transportation of radiological materials through the State of Missouri.

James Remillard, Director State Emergency Management Agency P.O. Box 116 Jefferson City, Missouri 65102 (573) 526-9100 or (573) 751-2748 (24 hour)

Health Services

The Department of Health is the lead agency for radiation control. A 1985 law directed the department to develop a radiation data management program and radiological laboratory capabilities. In addition, the law directed the department, in coordination with other agencies, to respond to radiological emergencies.

Paula Nickelson, Director Department of Health & Senior Services P.O. Box 570 Jefferson City, Missouri 65102 (573) 751-6001

Designee for Advance Notification of Shipments

James Remillard, Director State Emergency Management Agency 2302 Militia Drive P.O. Box 116 Jefferson City, Missouri 65102 (573) 751-9100

Radiological Emergency Assistance Contacts

Missouri Department of Health & Senior Services Division of Community and Public Health Office of Emergency Coordination P.O. Box 570 Jefferson City, Missouri 65102

(573) 634-2436 (24-hour Spill Line)

Emergency Team Members

Name	Title	Off-Duty Phone
Wilson, Jeremy	Radiological Response Program Manager	(573) 694-2590
Dustin Martin	Radiological Response Coordinator	(573) 301-5508

State Laboratory and Analytical Programs

Type of Sample	Type of Analysis	Major Equipment
Food	Gamma (MCA)	Three Canberra High Purity Germanium Detectors
	Alpha, Beta*	Canberra Alpha/Beta Proportional Counter Model S5XLB
Food	Alpha/Beta	Perkin-Elmer Tricarb 3180 TR/SL liquid scintillation counter
	Alpha spectrometer*	Canberra APEX Alpha Analyst System/ 7200- 04

* These two instruments are currently not under service contract and the lab does not currently have procedures to perform testing.

North Carolina

Governor

The Honorable Roy Cooper (Term ends January 2025) Office of the Governor 116 W. Jones Street Raleigh, North Carolina 27603-8001 (919) 733-4240

Emergency Services

The Department of Public Safety has primary responsibility for emergency operations preparation and conduct. When an event involves the participation of more than one state agency, the secretary of the department can designate a lead agency and allocate the necessary state resources.

The Division of Emergency Management activates the Emergency Operations Center and the State Emergency Response Team, as directed by the department. Its area emergency management coordinators provide liaison with federal, state and local officials regarding communication, damage assessment and response coordination.

William C. Ray, Director Division of Emergency Management Department of Public Safety 1636 Gold Star Drive Raleigh, North Carolina 27607 (919) 825-2291

Health Service Regulation

The Department of Health and Human Services administers the agreement state program under the rules and regulations of a governor-appointed Radiation Protection Commission. The department is designated as the lead agency for radiological materials emergency response and radiation protection. Technical response is provided through the department's Radiation Protection Section (RPS). The Chief of RPS is the State Liaison Officer (SLO) as designated by the Governor. This position advises the Governor on fixed nuclear facility emergencies.

Louis Brayboy, Acting Chief Radiation Protection Section 5505 Creedmoor Rd., Suite 100 Raleigh, North Carolina 27612-7221 (919) 814-2252

Designee for Advance Notification of Shipments

First Sergeant John L. Pointer North Carolina State Highway Patrol 1142 SE Maynard Road Cary, North Carolina 27511 (919) 319-1523

Radiological Emergency Assistance Contacts

Highway Patrol	(919) 733-3861 (800) 662-7956 (only in NC)
Division of Emergency Management	(800) 858-0368
Emergency Medical Services	(919) 733-2285
Radiation Protection Section Department of Health and Human Services Division of Health Service Regulation 5505 Creedmoor Rd., Suite 100 Raleigh, North Carolina 27612-7221	(919) 814-2252

Emergency Team Members

Name	Title	Off-Duty Phone
Brayboy, Louis	Radiation Protection Section Acting Chief	(919) 621-0124
Jeffries, William	Nuclear Power Plant Emergency Coordinator	(336) 264-0219
Cartoski, Travis	Incident Response Coordinator	(919) 621-4797
Warburton, Brandon	Nuclear Power Plant Emergency Response Specialist	(712) 320-0888
In addition to the above	named individuals, there are approximately 2	0 profossional staff

In addition to the above-named individuals, there are approximately 30 professional staff positions available as emergency team members.

NCRPS Sample Analytical Program

Type of Sample Type of Analysis		Major Equipment	
Air Filter	-Gross Alpha and Gross Beta -Gamma	See List Below	
Air Cartridge	-I-131	See List Below	
Finished or Groundwater	-Gross Alpha and Gross Beta -Gamma -Ra-226 and Ra-228 ^{SL} -Total U ^{SL} -ICP-MS for GE samples ^{SL} -H-3 ^{SL}	See List Below	
Raw Surface Water	-Gross Alpha and Gross Beta -Gamma -ICP-MS for GE samples -H-3	See List Below	
		See List Below	
Precipitation	-Gross Beta	See List Below	
Milk	-Gamma - I-131	See List Below	
Bottom Sediment	-Gross Alpha and Gross Beta -Gamma -Uranium (GE)	See List Below	
Fish ^{s∟}	-Gross Alpha and Gross Beta -Gamma	See List Below	
Soil	-Gross Alpha and Gross Beta -Gamma -Uranium (GE)	See List Below	
Vegetation	-Gross Alpha and Gross Beta -Gamma -Uranium (GE)	See List Below	
TLD	-Ambient Gamma	See List Below	

* GE – Global Nuclear Fuel (Old Name – General Electric)
* SL – State Laboratory of Public Health

NCRPS Laboratory and Analytical Equipment

A. Alpha/Beta Counters

- 1. One (1) Tennelec LB-4100 Alpha/Beta Counting System with 4- sample drawer (State Lab).
- 2. One (1) iSolo Passive implanted Planar Silicon detector. (Mobile Lab).
- 3. Three (3) Canberra XLB type alpha/beta counting systems. (State lab)
- 4. One (1) Canberra Alpha Analyst Alpha Spectroscopy System (State lab).

B. Gamma Detectors

- 1. One (1) EG&G Canberra Liquid Nitrogen Free Intrinsic Germanium Detector (P-type; 25% efficiency, 2.0 KeV Resolution at 1332 KeV) (Mobile Lab).
- 2. One (1) PGT Intrinsic Germanium Detector (N-type; 35% efficiency, 2.0 KeV resolution at 1.33 MeV) (State Lab).
- 3. Two(2) Canberra High Purity Germanium(HPGe) Gamma Spectroscopy detectors (State lab)
- 4. One (1) Eurisys Mesures Intrinsic Germanium Detector (23% efficiency; N-Type). (State Lab)

C. Gamma Analysis MCA and Software

- 1. Four (4) Canberra Apex MCA/Digital Spectrum Analyzer DSA (State Lab).
- One (1) Canberra Genie 2000 MCA on laptop (Mobile Lab).One (1) PC Computer Base MCA System (Canberra). Dell Computer, 34 GB Hard Drive, 1 GB RAM Memory (State Lab).
- 3. One (1) PC Computer Based MCA System (Canberra). Gateway PC has 50 GB hard drive.

D. Liquid Scintillation Counters

- 1. One (1) TriCarb Model 3170 TR/SL Liquid Scintillation System with automatic sample changer (State Lab).
- 2. Two (2) Bioscan Model 425-034 Portable Liquid Scintillation Detectors. Portable Detector is able to detect 8 nuclides; currently, systems only configured to detect Tritium and Carbon-14 (Mobile lab and Office Lab, 1 each).

E. Dosimetry & Ambient Gamma Monitoring (TLD- Gross Gamma/Beta)

- 1. Twenty (20) 0-20 milliRoentgen Self-Reading Pocket Dosimeters (SRPD's). Dosimeter type: gold-coated quartz-fiber electroscope ion chamber (Mobile Lab).
- 2. Twenty (20) 0-200 milliiRoentgen Self-Reading Pocket Dosimeters (SRPD's). Dosimeter type: gold-coated quartz-fiber electroscope ion chamber (Mobile Lab).
- 3. Six (6) Chargers for Self-Reading pocket dosimeters (Mobile Lab).

F. Global Positioning Systems/GIS

- 1. Five (5) Garmin Model eTrex 30 Handheld GPS Units (Consumer Grade).
- 2. Garmin nuvi 66LMT units (Consumer Grade).
- 3. One (1) HP T1700 PS 44-inch large format color printer.

G. Communications Equipment

- 1. Five (5) Portable Cellular Telephones.
- 2. One (1) Portable Multifunction (Scanner, Fax) Printer (AC Power).
- 3. One (1) Motorola Model Syntor X-9000 32-Channel Radio (installed in Mobile Laboratory).
- 4. Four (4) Iridium 9555 satellite phones

- 5. Twelve (12) Vertex Standard Model VX 160 VHF band portable transceiver radios.
- 6. Fourteen (14) Motorola 800 MHz VIPER radios

H. Wireless Radiation Detection System

1. Two (2) DroneRad Drones with 2 gamma detectors capable of remote open/closed window monitoring and onboard air sampler.

I. Air Samplers and Accessories:

- 1. Four (4) Battery Powered Portable Air Samplers.
- 2. One (1) RM Young Company Portable Weather Station

J. Field Counting Instruments:

- 1. Six (6) Ludlum Model 19 Micro R Meters for gross gamma radiation Measurement.
- 2. Fifteen (15) Ludlum 26-1 G-M detectors.
- 3. Six (6) Ludlum 14C G-M detectors with energy compensated 44-38 "hot dog" type probes.

K. Survey Instruments

- 1. Twelve (12) Ludlum 26-1 G-M Detectors.
- 2. Twelve (12) Ludlum 9-3 Ion Chambers.
- 3. Twelve (12) Thermo Fisher Scientific RadEye SPRDs.
- 4. Three (3) Ludlum 3001 Multi-Detector's with 44-10, 44-116 and 43-90 attachment probes.
- 5. Three (3) Ludlum 9-4 Ion Chambers.
- 6. Two (2) Thermo Fisher Scientific FH 40 G Multipurpose Survey meters with attached FHT 762 neutron detectors.
- 7. Four (4) CDV-718 Survey Meters
- 8. Twelve (12) Canberra Mini-Radiac Radiation Dosimeters

L. Vehicles:

1. One (1) Mobile Laboratory (32-foot, custom built truck equipped with satellite radiocommunications and analysis equipment).

1. Three (3) 4-Wheel Drive Sport Utility Vehicles.

M. Field Team Sustainability

1. Four (4) rechargeable flashlights.

N. Drones

- 1. Two (2) NEO Octo Drones with Air Sampler and 2 GM tube Detectors
- 2. Two (2) DJI Matrice 600 Pro Drone with Air Sampler and 2 GM tube Detectors
- 3. Two (2) DJI Practice Drones
- 4. Associated joystick controls, backup batteries and chargers.
- 5. Three (3) Apple IPads as control monitors.

Oklahoma

Governor

The Honorable John Kevin Stitt (Term ends January 2027) State Capitol Oklahoma City, Oklahoma 73105 (405) 521-2342

Health Services

The Department of Environmental Quality implements policies developed by the State Environmental Quality Board. The Board receives guidance from the Radiation Management Advisory Council in matters concerning radiation protection. Radiological emergency response is under the control of the Radiation Management Section, Department of Environmental Quality.

Scott Thompson Executive Director Department of Environmental Quality 707 N. Robinson, P.O. Box 1677 Oklahoma City, Oklahoma 73101-1677 (405) 702-7156

Designee for Advance Notification of Shipments

J.K. Allread, Captain Oklahoma Department of Public Safety Oklahoma Highway Patrol P.O. Box 11415 Oklahoma City, Oklahoma 73136 Phone: (405) 590-6851 24 hours: (405) 202-3763 Fax: (405) 425-2254 Email: jeremy.allread@dps.ok.gov

Radiological Emergency Assistance Contacts

Keisha Cornelius Radiation Management Section Department of Environmental Quality 707 N. Robinson, P.O. Box 1677 Oklahoma City, Oklahoma 73101-1677 Mike (405) 702-5162 (during business hours) (800) 522-0206 (after business hours)

Emergency Team Members

Name	Title	Off-Duty Phone
Keisha Cornelius	Environmental Program Administrator	Ph: (405) 702-5162 Cell: (405) 249-1033

Laboratory and Analytical Programs

Type of Sample	Type of Analysis	Major Equipment
Air	Gross Beta	One 3x3 NAI crystal with 8196 channel analyzer and low background steel shield.
Ambient Gamma	TLO	
Water	Gamma Spectrum Gross Beta Gross	One GM counter for Hi-Vol filters
	Alpha Uranium	One GeLi detector with 8196 channel analyzer with low background steel shield and computerized analysis capability.
		Two thin window proportional counters with 100 sample capacity sample charger.
		One Victoreen 2800 TLD reader using LIF chips.
		Six (6) Hi-Vol air samplers

South Carolina

Governor

The Honorable Henry McMaster (Term ends January 2027) State House 1100 Gervais Street Columbia, South Carolina 29201 (803) 734-2100 governor.sc.gov

Radiological Emergency Response

For response to radiological incidents, the Department trains and maintains an emergency response team. The Bureau of Environmental Health Services and the Bureau of Land and Waste Management personnel respond to technical issues consisting of environmental monitoring, exposure control, protective action guidance, advice on decontamination and disposal of radiological materials involved in fixed nuclear facilities, transportation accidents, unknown or exempt-quantity sources, and provides state and local response training. The Department's Bureau of Radiological Health responds to events involving radioactive materials licensed by their office.

Dr. Edward Simmer, Agency Director South Carolina Department of Health and Environmental Control 2600 Bull Street Columbia, South Carolina 29201 803-898-0124

Emergency Support/Coordination Services

The South Carolina Emergency Management Division, Office of the Adjutant General, coordinates the disaster training and response activities of the state and local governments. In the event of a Fixed Nuclear Facility emergency, the Division may activate the State Emergency Operations Center.

Kim Stenson, Director South Carolina Emergency Management Division Office of the Adjutant General 2779 Fish Hatchery Road West Columbia, South Carolina 29172-2096 (803) 737-8500 kstenson@emd.sc.gov

Designee for Advance Notification of Shipments

Lynne Garner, Manager Infectious and Radioactive Waste Management Section South Carolina Department of Health and Environmental Control Bureau of Land and Waste Management 2600 Bull Street Columbia, South Carolina 29201 garnerld@dhec.sc.gov

Radiological Emergency Assistance Contacts

South Carolina Department of Health and
Environmental Control (SCDHEC)(888) 481-0125 (24-hour)2600 Bull Street
Columbia, South Carolina 2920129201

South Carolina Emergency Management Division (803) 737-8500 (24-hour) 2779 Fish Hatchery Road West Columbia, South Carolina 29172

Emergency Management Members

<u>Name</u>	<u>Title</u>	<u>Off-Duty Phone</u>	Email Address
Mack, Robin	Assistant Chief, Bureau of Environmental Health Services	(803) 403-3140	mackrs@dhec.sc.gov
Jackson, Susan	Director, Division of Analytical & Radiological Services	(803) 917-0075	jacksosb@dhec.sc.gov
Garner, Lynne	Manager, Infectious and Radioactive Waste Management	(803) 422-5565	garnerld@dhec.sc.gov
French, Stacey	Director, Waste Management	(803) 898-0238	frenchsl@dhec.sc.gov
Roxburgh, Andrew	Director, Division of Radioactive Materials Licensing and Compliance	(803) 667-1486	roxburam@dhec.sc.gov
Jenkins, Susan	Chief, Bureau of Radiological Health	(803) 521-6262	jenkinse@dhec.sc.gov

1. The Nuclear Response Section is designated as the lead for planning and response to radiological emergencies and technical response for all fixed nuclear facilities and transportation emergencies.

 The Infectious and Radioactive Waste Management Section provides technical support, radiological evaluations, and scoping surveys for licensing and licensed facilities. In addition, the section responds to events involving radioactive materials licensed by their office. 3. The Department's Bureau of Radiological Health responds to events involving radioactive materials licensed by their office.

Nuclear Response Section Equipment

A. Dosimetry (TLD- Gross Gamma/Beta):

- 1. Forty-three (43) Rados RAD-60R alarming dosimetry.
- 2. Personal PRDs.

B. Communications Equipment:

- 1. Fifteen (15) Programmable Motorola 800 Model APX 6000 portable radios.
- 2. Five (5) Cellular Telephones.
- 3. Three (3) Portable Multifunction (Scanner, Fax) Printer (AC Power).
- 4. Five (5) Satellite phones.

C. Air Samplers:

1. Five (5) Portable F&J Model DF-AB-40L-Li air samplers with charcoal/silver zeolite cartridges and filter paper for low-volume air samplers.

D. Portal Monitors:

- 1. Two (2) Ludlum 52 portal monitors.
- 2. Two (2) Ludlum 52-1 portal monitors adaptable to vehicle or livestock surveys.
- 3. One (1) Thermo TPM-903B Portal Monitor.

E. Survey Instruments:

- 1. Twelve (12) Thermo/Eberline Model E-600 kits with hot dog, pancake, rem ball, 100cm2 Alpha/Beta, and 2-inch sodium iodide probes.
- 2. Two (2) Thermo FH40 G-L Multipurpose Meter kits with GM probe, underwater probe, neutron probe (in counts per second), scintillation probes and a 13-foot teleprobe.
- 3. Four (4) FLIR IdentiFINDER R400 isotope identifiers.
- 4. Four (4) Thermo NBR High Sensitivity Gamma Radiation Monitors.
- 5. Nine (9) RO-20 Ion Chamber.
- 6. Two (2) Fluke 451P Ion Chambers.
- 7. Nineteen (19) Thermo RadEye GN Gamma Neutron Pagers.
- 8. One (1) Thermo RadEye G Gamma Pager with Area Monitor.
- 9. Ten (10) RadEye B20 Survey Meters.
- 10. Four (4) Ludlum extended reach microR meters (2 #192-6, 2 #3006).
- 11. Seven (7) Thermo SPRD spectroscopic personal radiation detectors.
- 12. Two (2) RadEye PX instruments with REM balls for neutron measurement.
- 13. Two (2) RadEye SX with SPAA probes.

F. Emergency Vehicles:

1. Five (5) Chevrolet Suburbans with trailer towing capability equipped with warning lights/sirens and response equipment.

Type of Sample	<u>Type of Analysis</u>	Major Equipment
Air Filter	-Gross Alpha and Gross Beta -Gamma	See List Below
Smears	-Gross Alpha and Gross Beta -Gamma	See List Below
Air Cartridge	- Gamma, I-131	See List Below
Water	-Gross Alpha and Gross Beta -Gamma -Tritium -Strontium 89 & 90 -Radium 226 -Radium 228 -Uranium	See List Below
Milk	-Gamma -Tritium	See List Below
Sediment	-Gross Alpha and Gross Beta -Gamma	See List Below
Soil	-Gross Alpha and Gross Beta -Gamma	See List Below
Tissue	-Gross Alpha and Gross Beta -Gamma -Tritium	See List Below
Vegetation	-Gross Alpha and Gross Beta -Gamma -Tritium	See List Below

SC DHEC Radiochemistry Laboratory's Analytical Capabilities

List of Major Laboratory Equipment for Fixed and Mobile Laboratories:

A. Alpha/Beta Counters

- 1. Four Protean WPC 1050 Low Background Thin Window Gas-Flow Proportional Counter equipped with automatic sample changer. (Fixed Lab)
- 2. Three Protean MPC9604 Low Background Thin Window Gas-Flow Proportional Counter equipped eight detectors each. (Fixed Lab)

B. Liquid Scintillation Counters

1. One Perkin Elmer Tri-carb 3180 Liquid scintillation System with automatic sample changer. (Fixed Lab)

C. Gamma Detectors

- 1. One Mirion HPGE Coaxial Detector 95% efficiency. (Fixed Lab)
- 2. One Mirion HPGE Coaxial Detector 90% efficiency Has a 400cc container autosampler. (Fixed Lab)
- 3. One Ortec HPGE Coaxial Detector 100% efficiency. (Fixed Lab)
- 4. One Ortec HPGE Coaxial Detector 100% efficiency. (Fixed Lab)
- 5. One Ortec HPGE Coaxial Detector 100% efficiency Has a 3L marrinelli autosampler. (Fixed Lab)
- 6. One Ortec HPGE Coaxial Detector (electronically cooled with backup battery)– 50% efficiency. (Mobile Lab)

D. Inductively Coupled plasma mass spectrometry (ICPMS)

1. One Perkin Elmer NexION 1000 ICPMS

E. Vehicle

- 1. One Mobile Laboratory Ford E-450 truck equipped with on board generator.
- 2. One trailer with portable generator and supplies.

Tennessee

Governor

The Honorable William Lee (Term ends January 2027) State Capitol Nashville, Tennessee 37219 (615) 741-2001

Emergency Services

The Tennessee Emergency Management Agency (TEMA), within the Department of Military, is the responsible agency for the development of state emergency plans and procedures. By executive order, TEMA is the agency responsible for coordinating state response to all emergencies, including peacetime radiological accidents. TEMA also provides an Emergency Operations Center that is operational 24 hours a day. TEMA maintains, calibrates, and provides radiological instrumentation to state and local government agencies for use in the detection of radiation. Additionally, TEMA coordinates and conducts radiological training for state and local first responders.

Patrick C. Sheehan Director, Tennessee Emergency Management Agency State Emergency Operations Center 3041 Sidco Drive Nashville, Tennessee 37204-1502 (615) 741-0001

Governors Authorized Representative for Advance Notification of Shipments (For Highway

Route Control Quantities, 10 CFR Part 71 and 73)

Matt Heckard Assistant Director for Preparedness Preparedness Bureau Tennessee Emergency Management Agency State Emergency Operations Center 3041 Sidco Drive Nashville, Tennessee 37204 (615) 939-0505 Matthew.Heckard@tn.gov

Radiological Emergency Assistance Contacts Emergency Management Agency

Watchpoint (615) 741-0001 (24 Hours)

(800) 262-3300 (In TN) (800) 258-3300 (Out Of TN)
Current Inventory of Radiological Equipment for the State of Tennessee (TEMA Equipment)

Equipment Type/Status	Quantity
2008 Suburban Adaptable Radiation Area Monitor (ARAM) system	1
G-4 Gamma / Neutron Detection Potable Backpacks	2
Ludlum Measures Model 52-1 Portal Monitor	2
WM Johnson Model GS310 Portal Monitor	1
Mirion (Canberra) Inspector 1000 Multi-Channel Analyzer w/ IPROL-1 Nal Probe & Neutron Probe	3
Mirion (Canberra) Inspector 1000 Multi-Channel Analyzer w/ IPROL-1 Nal Probe	7
Mirion (Canberra) Model FC 2B portable MRAD Calibration Source	15
Mirion (Canberra) CDV-718A Radiacmeter w/ Beta-Gamma Probe	585
Mirion (Canberra) CDV-718A Pancake Probe	368
Canberra MRAD 213 Mini-Radiacmeter	647
S.E. International CDV-750 M6 Dosimeter Charger, Hand	937
A/C Powered Dosimeter Charger	14
Ludlum Model 3 Survey Meter w/ Model 44-9 GM Pancake Probe	397
Arrow-Tech 0-20R direct-read dosimeters (emergency kit issue)	3447
Arrow-Tech 0-20mR direct-read dosimeters (emergency kit issue)	2385
Bendix CDV-730 Dosimeter stock for disater use only)	7587
DCA 0-20R direct-read dosimeters (bulk issue to TVA/DOE agencies)	1964
Optically Stimulated Luminescence (OSL) dosimeters (issued by TVA for TVA risk/host counties)	1300
Ludlum Model 2241 Neutron Dose Survey Meter	1
Argon Electronics DT-616-Sim Simulation Probes for Canberra	15
Argon Electronics Simulation Source Generator Sets	2
Ludlum Model 2200 Scaler Ratemeter	2
Ludlum Model 500-1 Calibration Unit (for Ludlum 3 calibreation)	1

Health Services

The Department of Environment and Conservation administers the state's radiation control program. In support of the Tennessee Emergency Management Agency, the department provides radiological monitoring, training guidance, protective action advice, and decontamination assistance. The department's Division of Radiological Health is responsible for training and equipping Radiological Monitoring Teams, which are part of the State Radiological Response Team. It also provides radiological accident assessments.

David Salyers Commissioner, Department of Environment and Conservation Tennessee Tower, Second Floor 312 Rosa L Parks Ave Nashville, Tennessee 37243 (615) 532-4547

Designee for Advance Notification of Shipments (For U.S. NRC 10 CFR Part 37)

Beth Shelton Director Division of Radiological Health 15th Floor, Tennessee Tower 312 Rosa L Parks Nashville, Tennessee 37243 (615) 454-8716

Radiological Emergency Assistance Contacts

Division of Radiological Health Department of Environment and Conservation 15th Floor, Tennessee Tower 312 Rosa L Parks Nashville, Tennessee 37243

(615) 532-0364 (Central Office) (615) 483-7758 (Emergency Phone)

Emergency Team Members

Name	Title	Off-Duty Phone
Shelton, Beth	Director	(615) 454-8716
Holcomb, Andrew R.	Manager, Emergency Preparedness	(615) 289-3384
Snyder, Paula	Deputy Director of Central Office	(615) 767-1577
Seeger, Steve	Deputy Director of Field Offices	(423) 332-9663
Crihfield, Ryan	Environmental Fellow	(615) 812-8416
Parsons, Ron	Manager, Radioactive Materials Licensing	(615) 939-0517
Bingaman, Jerry	Manager, Technical Services	(615) 557-5583
McWilliams, Cliff	Radioactive Waste Management	(615) 852-9417
Grewe, Allen E.	Manager, Memphis Field Office	(901) 482-3573
Belva, Stuart	Manager, Chattanooga Field Office	(423) 463-7646
Gonzalez, Mariza	Manager, Knoxville Field Office	(865) 243-0754
Ford, Amy	Manager, Nashville Field Office	(615) 613-5593
Hayes, Jessica	Manager, X-ray Registration/RI	(423) 871-8553
**In addition to the abov	e listed individuals, there are 30 Health Phys	sicists available for

**In addition to the above listed individuals, there are 30 Health Physicists available for emergency response.

Laboratory and Analytical Programs

Available Sample Matrices

Air Filter Charcoal/Silver Zeolite Cartridge Fish Milk Sludge Soil Vegetation Water

Available Types of Analyses

Gamma Spectroscopy Gross Alpha/Beta Radium 226/228 Strontium 89/90 Total/Isotopic Uranium Technetium 99

<u>Equipment</u>

Ortec Gamma Vision Gamma Spectroscopy system with 2 HpGe Detectors Perkin Elmer 3100 TR Protean Automatic 100 sample capacity Protean four drawer manual sample counter

Current Inventory of Radiological Equipment for the State of Tennessee (DEPT of Radiological Health)

Manufacturer	Model	Total available	Detector Type
Bicron	Micro Rem	7	Organic Scintillator
Bicron	RSO-5	1	lon Chamber
Canberra	Falcon 5000	1	HpGe
Canberra	Insp. 1000	4	Nal Scintillator / RIID
Exploranium	GR-135	3	Nal Scintillator / RIID
F&J	DF-1	7	High Vol Digital Air Pump
F&J	DF-AB-40L	5	High Vol Digital Air Pump
F&J	HV-1BC	6	High Vol Analog Air Pump
F&J	LV-1	1	High Vol Analog Air Pump
F&J	MC-60L	1	Air Sampler System Calibrator
Ludlum	12 kit	8	Multiple Probe Response Kit
Ludlum	12-4	1	Rem Ball 42-31
Ludlum	12S	6	Internal Nal Scintillator
Ludlum	19	8	Internal Nal Scintillator
Ludlum	193-6	3	Nal Scintillator extended probe
Ludlum	2241-2	1	Multiple Probe Response Kit
Ludlum	2241-3	9	Multiple Probe Response Kit
Ludlum	25	12	Internal GM / Electronic Dosimeter
Ludlum	26-1	19	Internal GM/Frisker/exposure filter
Ludlum	3019	10	Internal CsI scintillator / Digital
Ludlum	375-10	1	Internal Nal Scintillator
Ludlum	52-1-1	1	Portal Monitor / 4 Nal Scintillators
Ludlum	9-3	11	lon Chamber
Ludlum	Model 3	11	GM frisker probe
Ludlum	Model 5	3	Internal GM
MDH	1015	9	Ion Chamber
NucSafe	Guardian G4	1	Nal Scintillator / portal Backpack/ RIID
Ortec	Detective EX-100	1	HPGe & He3 Neutron Detector

Radcal	ACCU-Gold	4	Ion Chamber
Raysafe	ThinX	15	X-ray Survey
Thermo Eberline	RadEye PX	3	Wendi / Neutron
Thermo Elec.	Micro Rem	3	Organic Scintillator
Thermo Elec.	RIIDEye	6	Nal Scintillator / RIID
Unfors XI	XI	11	X-ray Survey / RF

Texas

Governor

The Honorable Greg Abbott (Term ends January 2027) State Capitol Austin, Texas 78711 (512) 475-4101

Emergency Services

The Texas Division of Emergency Management prepares, maintains and coordinates the state's comprehensive emergency plan. A Disaster Emergency Funding Board maintains a disaster contingency fund. The Governor, Lieutenant Governor and the directors of the State Board of Insurance, the Department of Human Resources and the Division of Emergency Management are members.

The Division provides the emergency response functions that are not available through other state agencies. These include shelter planning and promotion, crisis relocation planning, continuity of government programs, resources management, economic stabilization plans, emergency public information activities, emergency management training, hazard mitigation and recovery and rehabilitation activities.

Nim Kidd, State Coordinator Texas Division of Emergency Management Department of Public Safety P.O. Box 4087 Austin, Texas 78733 (512) 424-2000

Department of State Health Services

Texas' radiation safety statute designates the Department of State Health Services (DSHS) as the radiation control agency. The Radiation Control Program (RCP) within the agency administers the agreement state program. The RCP develops and maintains the DSHS radiological emergency management (REM) plan and procedures. In the event of a radiological incident, the RCP is responsible for detection, measurement and supervision of clean-up of materials that are released into the environment. The RCP also provides an assessment of the incident as the basis for the assignment of protective recommendations and responses.

David Lakey, M.D. Commissioner Department of State Health Services 1100 West 49th Street Austin, Texas 78756 (512) 458-7375

Designee for Advance Notification of Shipments

Ruben Cortez Radiation Section Texas Department of State Health Services P.O. Box 149347-1986 Austin, Texas 78714-934 (512) 834-6672

Radiological Emergency Assistance Contacts

(Mailing Address) Radiation Control Program Department of State Health Services Inspection Unit – MC1986 P.O. Box 149347 Austin, Texas 78714-9347

Radiation Control Program

The Exchange Building 8407 Wall Street Austin, Texas

(Physical Address)

Fax (512) 834-6654 (For routine communications) Fax (512) 832-9715 (For emergency use only)

(512) 458-7460 (24 Hours)

(512) 834-6770 (8am - 5pm)

Texas Division of Emergency Management Texas Department of Public Safety 5805 N. Lamar Blvd. Austin, Texas 78773-0001

(512) 424-2000 Ext. 2138 (8am - 5pm) Ext. 2277 (24 Hours)

Radiological Emergency Response Team (RERT) Members

Name	Title	Off-Duty Phone
Sullivan, Charlotte	Manager, Regulatory	(512) 834-6600
Vacant	Manager, Radiation Inspections Branch	charlotte.sullivan@dshs.state.tx.us
Free, Robert E.	Manager, Environmental	(512) 759-2292
	Monitoring Group	robert.free@dshs.state.tx.us
Corbin, Glenn	Emergency Planner	(512) 912-8052
		glenn.corbin@dshs.state.tx.us
Graves, Chris	Emergency Planner	(512) 289-88058
		chris.graves@dshs.state.tx.us
Moore, Chris	Emergency Planner	(512) 291-8865
		chris.moore@dshs.state.tx.us
Walker, Rae	Emergency Planner	(512) 924-4178
		rae.walker@dshs.state.tx.us

RERT Composition

The Radiation Control Program (RCP) RERT can provide one shift of personnel which includes the following manpower and skills:

Chief of Field Operations Accident Assessment Licensee Technical Liaison Field Monitoring Team Leader Field Monitoring Team Members Sample Preparation & Coordination Emergency Operations Coordinator Field Sample Analysis (Mobile Lab) Contamination Control (Roadblocks) **Decontamination Assistance** Medical Facility Liaison Staging Area Coordination Logistics Support Instrument Maintenance & Calibration **Courier Service** State EOC Liaison Disaster District EOC Liaison Local Government EOC Liaison Public Information Coordination Administrative/Clerical Support

1 individual 3 individuals 1 individual 2 individuals 8 individuals (4 two-person teams) 2 individuals 1 individual 2 individuals 8 individuals 4 individuals 1 individual 1 individual 4 individuals 2 individuals 4 individuals 2 individuals 2 individuals 2 individuals 3 individuals 4 individuals

Detection, Measurement and Evaluation Systems

Fixed Laboratory Facility:

The Texas Department of State Health Services has in its headquarters laboratory the following equipment:

- 1 Gamma Spectroscopy System
- 2 Automatic Sample Changers (Out of Service: Upgrade Pending)
- 1 High Purity (>30%) Germanium Detectors
- 7 Manual Alpha-Beta Proportional Systems
- 9 Ludlum Model 200 Scalers with Scintillation Detectors
- 2 Liquid Scintillation System
- 4 Alpha-Beta Proportional System with Automatic (100 capacity) Sample Changer
- 16 Alpha Spectroscopy Channels

Mobile Laboratory:

The RCP mobile analysis laboratory is contained within a 32' gooseneck-type trailer.

- 1 Gamma Spectroscopy System
- 2 High Purity (>25%) Germanium Detectors (1 p-type, 1 n-type)

Emergency Response Vehicle:

The RCP emergency response vehicle consists of a large modular ambulance-type vehicle equipped for incident response. Power can be supplied by a truck-mounted 6.5 kw generator or obtained from commercial distribution lines. Analysis is performed using a SAMS 940 multi-channel analyzer, Thermo HandECount or by survey meters capable of measuring alpha, beta or gamma radiation.

Miscellaneous Equipment:

In addition to the equipment listed for the laboratory and the mobile units, the Radiation Control Program has the following miscellaneous equipment available for incident response:

- 5 Power Inverters (12vdc to 115vac, 60Hz)
- 23 Low Volume Air Samplers
- 3 High Volume Air Samplers
- 30 Ludlum 2241-3 Scaler/Survey Meters
- 50 Ludlum 14-C Survey Meters with:
- 100 Ludlum model 44-6/44-38 Thin Wall Gamma Probes
- 70 Ludlum model 44-2 High Energy Gamma Scintillators
- 30 Ludlum model 44-3 Low Energy Gamma Scintillators
- 55 Ludlum model 43-2 Alpha Scintillators
- 4 Ludlum model 44-40 Shielded Pancake Probes
- 50 Ludlum model 44-9 Pancake Probes
- 8 Ludlum model 44-7 End Window Geiger-Muller Probes
- 30 0-500 r/hr Personal Electronic Dosimeter (Canberra Mini-Radiac)
- 200 0-200mR Self-Reading Pocket Dosimeters
- 200 0-20R Self-Reading Pocket Dosimeters
- 250 Emergency Response Team Identification Badges with (2 each) TLD Permanent Dosimetry Chips Incorporated
- 6 Hand-Held VHF Narrowband 5-watt Radios
- 2 30-Watt VHF Narrowband Base Radios (porti-mobile)
- 10 30-Watt VHF Narrowband Mobile Radios
- 25 Eberline E-600s
- 25 Eberline Smart Low Energy Gamma (SLEG-1) Probes
- 25 Eberline Smart Alpha/Beta Scintillators (SHP-380AB) Probes
- 25 Eberline Smart Geiger-Mueller (SHP-270) Probes
- 25 Eberline Smart Pancake (SHP-360) Probes
- 6 Eberline Smart Low Energy Gamma (PG-2) Probes
- 4 Eberline Alpha Air Monitors (Alpha-6A) with Air Flow Pumps
- 2 SAC-4 Alpha Scintillation Counters
- 7 Fidler Probes with E-600 Survey Meters
- 1 Violinist with Fidler Probe
- 1 SAM 940 LaBr MCA with neutron detector and GPS
- 1 SAM 940 Nal MCA with neutron detector
- 3 SAM 940 Nal MCA
- 2 SAM 935 Nal MCA
- 2 Thermo RadEye Gamma Scintillator
- 2 Thermo RadEye-ER Gamma Scintillator
- 6 Thermo RadEye-G Gamma Scintillator
- 8 Thermo Electron Handheld Interceptor MCA & neutron detector
- 1 Thermo HandECount[™] alpha/beta wipe analyzer
- 24 Portable Garmin GPS units

Virginia

Governor

The Honorable Glen Youngkin (Term ends January 2026) P.O. Box 1475 Richmond, Virginia 23218 (804) 786-2211

Emergency Services

The Virginia Department of Emergency Management (VDEM) is responsible for the preparation and implementation of a comprehensive emergency operations plan to cope with emergencies and disasters. Coordination of emergencies is conducted through the Virginia Emergency Operations Center (VEOC). With respect to a comprehensive radiological emergency response, VDEM works jointly with the Department of Health's (VDH) Office of Radiological Health and other agencies if necessary, to coordinate federal, state and local response activities and a public information program.

Shawn Talmadge, State Coordinator Department of Emergency Management 9711 Farrar Court, Suite 200 North Chesterfield, VA 23236 (804) 267-7601

Health Services

In an emergency, VDH has primary responsibility for health and medical assistance. The agency's Office of Radiological Health is responsible for administering Virginia's Radiation Control Program and for maintaining a state Radiological Emergency Response Team, which has radiological monitoring and dose assessment capabilities. The Radiological Emergency Response Team may be activated upon request by VDEM or VDH management.

M. Colin M. Greene, MD, MA State Health Commissioner Department of Health P.O. Box 2448 Richmond, Virginia 23218 (804) 864-7009

Designee for Advance Notification of Shipments

Virginia Department of Emergency Management 9711 Farrar Court, Suite 200 North Chesterfield, VA 23236 (804) 267-7651

Radiological Emergency Assistance Contacts

Virginia Department of Emergency Management (804) 674-2400 (24 Hours)

Virginia Department of Health Office of Radiological Health 109 Governor St., 7th Floor Richmond, Virginia 23219 (804) 864-8150

Emergency Team Members

Name	Title	Off-Duty Phone
24/7 Duty Officer	Rad Health Duty Officer	(804) 674-2400
Perlas, Lea	Director, Office of Radiological Health	(804) 674-2400
Ettinger, Matthew	Director, Environmental Monitoring and	(804) 674-2400
	Emergency Preparedness Programs	
Fenta, Asfaw	Director, Radiological Materials Program	(804) 674-2400
Perlas, Al	Compliance Officer, X-ray Programs	(804) 674-2400
**Other Division staff	are available as required.	

Laboratory and Analytical Programs

Type of	Type of Analysis	Major Equipment
Sample		

air (filter),	Gross Alpha	Ludlum Model 3030
water, wipe test		
	Gross Beta	Ludlum Model 3030
water, wipe test	tritium	Packard Tri-Carb 2900TR Liquid Scintillation
		Counter
air (charcoal),	gamma analysis	Canberra Genie-PC spectroscopy system with
biota, milk,		3X3 sodium iodide detector and high purity
water, wipe test		germanium detector
ambient gamma	Environmental TLD	Landauer's mircroStar reader OSL
		environmental dosimeters
Radionuclide		Ortec Detective-200, Canberra Falcon and
identification		FLIR System Inc. Model identiFinder

Emergency Vehicles:

Mobile Command Radiological Laboratory- 2007 Pierce Enforcer, 50,500 lbs. GVW, Height 12 feet 6.75 inches, Generator (30KW); Mobile Radios, FAX Machine, Satellite Telephone, GPS, Portable Monitoring Equipment including air samplers, Personal Dosimetry, Protective Clothing, and Potassium Iodide Tablets, Canberra Genie-PC Gamma Spectroscopy System, Canberra Low Background Alpha/Beta System, and Packard Tri-Carb Liquid Scintillation Analyzer.

Federal Emergency Management Agency

Region III (District of Columbia, DE, MD, PA, VA, WV)		
Regional Administrator: MaryAnn Tierney FEMA, Region III 615 Chestnut Street, 6th Floor Philadelphia, Pennsylvania 19106 Region IV (AL, FL, GA, KY, MS, NC, SC, TN)	Commercial: Fax:	(215) 931-5500 (215) 931-5621
Regional Administrator: Robert Samaan FEMA, Region IV 3003 Chamblee Tucker Road Atlanta, Georgia 30341	Commercial: Fax:	(770) 220-5200 (770) 220-5230
Region VI (AR, LA, NM, OK, TX)		
Regional Administrator: Tony Robinson FEMA, Region VI Federal Regional Center 800 N. Loop 288 Denton, Texas 76209-3698	Commercial: Fax:	(940) 898-5399 (940) 898-5325
Region VII (IA, KS, MO, NE)		
Regional Administrator: Andrea Spillars FEMA, Region VII 9221 Ward Parkway, Suite 300	Commercial: Fax:	(816) 283-7061 (816) 283-7582

Kansas City, Missouri 64114-3327

A. <u>Authorities</u>. FEMA has been assigned, by a Presidential directive dated December 7, 1979, lead responsibilities for all federal offsite radiological emergency preparedness. This directive consolidated, under FEMA, those emergency response activities previously assigned to three agencies: The Defense Civil Preparedness Agency (DCPA), the Emergency Preparedness Agency and the Federal Disaster Assistance Agency (FDAA). FEMA has published rulemaking to fulfill this directive.

1. <u>44 CFR 350 (48 FR 44335</u>, September 28, 1983 and as amended). This rule describes the criteria for reviewing, evaluating and approving state and local radiological emergency plans and preparedness. It also describes the process FEMA uses to evaluate and determine the state and local governments' capability to effectively implement these plans and preparedness during drills and exercises.

FEMA and the NRC jointly published their guidance document, NUREG 0654/FEMA-REP-1, Revision 1, in November 1980. This document contains the established 16 federal planning standards and related evaluation criteria for evaluating offsite (utility, state and local government) radiological emergency planning. The 16 planning standards are incorporated into the

NRC rule (10 CFR 47 (a) (1-16)) and the FEMA rule (44 CFR 350 (1) (1-16)). REP-15 has been superceded by the Evaluation Criteria, which was published in the Federal Register on September 11, 2001. Additionally, FEMA-REP-10 provides guidance in evaluating state/local alert and notification systems and EPA 400-92-R-001 provides guidance on protective action recommendations.

- 2. <u>44 CFR 351 (47 FR 10759</u>, March 11, 1992 and as amended). This regulation assigns federal agency responsibilities for assisting state and local governments in emergency planning and preparedness for fixed nuclear facility accidents and transportation incidents involving radioactive materials. FEMA also has published a Federal Radiological Emergency Response Plan (FRERP) (50 FR 46542, November 8, 1985) which assigns emergency response functions to federal agencies and provides a structure for effectively coordinating federal assistance to state and local governments for accidents at nuclear power plants. This plan has the concurrence of twelve federal agencies. FEMA is now developing a radiological annex to the comprehensive, all-hazards Federal Response Plan (FRP) which was published in April 1992. The FRERP will remain as the primary federal plan for peacetime radiological emergencies in the absence of a Presidential Declaration of Emergency or disaster.
- 3. <u>44 CFR 352, (FR</u> August 2, 1989). This rule established policies and procedures for a licensee submission of a certification of a "decline or fail" situation should state or local governments choose not to participate in radiological emergency planning. It described FEMA's determination concerning federal assistance to the licensees. It also provided procedures for review and evaluation of the adequacy of the licensee offsite radiological emergency planning and preparedness, which is a precondition to its submission of a "decline or fail" certification.
- 4. <u>44 CFR 353 (FR</u> March 6, 1991). This rule established a structure for assessing user fees to NRC licensees to reimburse the federal government for some costs of the radiological emergency preparedness program. This rule has been superseded by 44 CFR 354.
- 5. <u>44 CFR 354 (FR</u> July 1, 1993). This rule authorized FEMA to assess fees to NRC licensees for commercial power plants for recovery of not less than 100 percent of the amounts anticipated by FEMA to obligated for the radiological emergency preparedness program for fiscal year 1993. This rule has been extended for each of the following fiscal years.
- B. <u>FEMA Regional Offices</u>. (Only those states that are a part of SERC are listed.) FEMA Region II is located in New York City and serves Puerto Rico; FEMA Region IV is located in Atlanta, Georgia and serves the states of Alabama, Florida, Georgia, Kentucky, Mississippi, North Carolina, South Carolina and Tennessee; FEMA Region VI is located in Denton, Texas and serves the states of Arkansas, Louisiana, New Mexico, Oklahoma and Texas; FEMA Region VII is located in Kansas City, Missouri and serves Iowa, Kansas, Missouri and Nebraska.
- C. <u>State Emergency Offices</u>. In each state a lead agency has been designated for radiological emergency preparedness. In most states this agency is either the State Emergency Management Agency or the Radiological Health organization in the State Health Department. The designated lead state agency works closely with their corresponding FEMA Regional office to develop state and local capabilities to respond to peacetime nuclear and radiological accidents/incidents. Each state Emergency Management office has a staff member designated as a Radiological Officer and most states have Radiological Instrument Inspection, Maintenance and Calibration Facility. These personnel and facilities are, in part, funded by FEMA. Each state has personnel who are licensed users of multi-curie radiation sources.

- D. Instrumentation. As of August 1994, over 36,100 radiological instrument sets have been granted by FEMA to the States of Region IV and over 22,500 sets have been granted to the states of Region VI. Additional sets have been granted to the State of Missouri and to Puerto Rico. These sets, which were developed in the 1960s, were originally intended for use in the high gamma radiation environment that would have followed a nuclear war. These instruments include 25,800 sets for self-protection monitoring by emergency services and vital facility personnel (RADEF Instrument Set types CDV-777 and CDV-777-1); 6,800 sets for weapons effects stations (RADEF Instrument Set type CDV-777A); and over 26,000 sets for fallout shelters (RADEF Instrument type CDV-777-2). The different sets contain various combinations of radiation survey meters and dosimeters with scales ranging from 0-200 mR to 500 R. The instrument sets would be of small utility in a peacetime radiological incident, but some of the instruments that they contain could be valuable under these conditions. These sets were distributed throughout the FEMA Regions and are under the control of state and local emergency preparedness organizations. Sets for selfprotection and weapons effects reporting are located at many facilities in the states. Shelter sets and additional instrument sets are stored under local control. In addition to the instrument sets mentioned above, FEMA has granted to each state two or more specially modified CDV-700-M GM survey meters equipped with a thinend-window GM Tube and probe housing. This instrument has an increased detection sensitivity for alpha and beta radiation.
- E. <u>Communications</u>. FEMA has the capability to provide a multifaceted communications capability to connect national, regional, state and local governments for emergency communications. Among the systems available are:
 - <u>FEMA National Radio System (FNARS)</u>. A high-frequency radio system that provides connections to each state in each FEMA Region, and connections to FNARS stations at the National level, other FEMA Regions, other federal agencies and military installations. This system uses single sideband modulation for voice transmission and data communications.
 - <u>FEMA Wide Area Network (WAN)</u>. A computer network connecting each state with their FEMA Region, and which also provides data communications with stations at FEMA National and with other FEMA Regions.
 - <u>National Warning System (NAWAS)</u>. A full-time leased wire system operating between two National Warning Centers, each of the ten FEMA Regions, state and local governments and various warning points strategically located throughout the regions. All primary warning points are staffed for 24-hour operation.
 - Mobile Emergency Response Support (MERS) Detachment. The five FEMA MERS Detachments stationed at strategic locations around the nation are multivehicle organizations designed to support federal emergency response operations. The communication, logistic, operation, and life support service provided by these Detachments is fully independent of local infrastructure. Communication support is based around a large mobile communications truck, called the Multi-Radio Vehicle (MRV), that carries high frequency (HF), very high frequency (VHF), ultra high frequency (UHF), line-of-sight microwave and KU band satellite radios to support voice and data transmissions, along with telephone, modem, FEMA LAN/WAN, video conference, and television broadcast capabilities. The MRV, using the KU band satellite, can provide high quality, multi-line telephone service to any remote location in a very short time frame. Additionally, the Detachment in Denton, Texas is equipped with an Emergency Operations Vehicle (EOV) that can provide a comfortable, well-equipped space for 20 people to manage response operations. Other vehicles under MERS control can further augment radio or telephone capabilities from disaster sites, provide logistics and life support services to federal disaster teams, provide

electrical generation capability, provide environmental control to special operating sites and provide fuel to operate all of the above for extended periods. The majority of the MERS vehicles are air transportable by military transport aircraft and can be on-scene and operational at a disaster site in less than 24 hours.

Recommended Composition of RADEF Instrument Sets

Set Types	Quant	Quantity and Types of Instruments in Sets			
	CDV-700	CDV-715	CDV-717	CDV-742	CDV-750
CDV-777	1	2	0	6	1
CDV-777A	1	1	1	6	1
CDV-777-1	1	1	0	6	1
CDV-777-2	0	1	0	6	1

U.S. Department of Energy

Radiological Emergency Assistance Contacts

Emergency Operations Center

(202) 586-8100

Radiological assistance from the U.S. Department of Energy Radiological Assistance Program Regions is available 24 hours a day and can be requested by calling the emergency assistance numbers listed.

Region 2 (AR, KY, LA, MS, MO, PR, TN, VI, VA, WV)

Regional Program Manager:William RedingOak Ridge Office0U.S. Department of Energy(865) 576-1005P.O. Box 2009, MS82890Oak Ridge, Tennessee 37831-8289

Region 3 (AL, FL, GA, NC, SC)

Regional Program Manager: Jeffrey J. Galan Savannah River Site U.S. Department of Energy National Nuclear Security Administration (803) 725-3333 Office of Nuclear Incident Response (NA-84) P.O. Box A Aiken, South Carolina 29802

Region 4 (AZ, KS, NM, OK, TX)

Regional Program Manager:Marc PhippsU.S. Department of Energy(505) 845-5799National Nuclear Security AdministrationOffice of Nuclear Incident Response (NA-84)Building 401 M Street SEAlbuquerque, New Mexico 87108

U.S. Environmental Protection Agency

Radiological Emergency Assistance Contacts

National Analytical Radiation Environmental Laboratory (NAREL)	On-Duty:	(334) 270-3400
U.S. Environmental Protection Agency 540 South Morris Avenue		
Montgomery, Alabama 36115-2601		

Emergency Team Members

Name	Title	Off-Duty Phone
Griggs, John	Director, NAREL	(334) 462-9023 Cell
Poppell, Sam	Director, Center for Environmental Monitoring; Emergency Response Coordinator	(334) 546-7214 Cell

Laboratory and Analytical Programs

As of December 2022; The Mobile Environmental Radiation Laboratory (MERL), is in a non-deployable status due to critical staff departures *

Mobile Power Systems

Two (2) 20 Kw Semi Tractor Mounted Generators which are connected to the MERL.

Communications

Five (5) digital handheld portable Radios - MERL Cellular telephones - MERL Satellite uplink with VOIP/phone/internet - MERL

Analytical

Alpha energy spectrometry (fixed lab), gamma energy spectrometry (NaI and high purity germanium) (fixed lab and MERL), Gross alpha-beta proportional counting (fixed lab and MERL) and Liquid Scintillation Counting (LSC) for alpha and beta emitting radionuclides (fixed lab)

*A capability of the MERL; however, the MERL is in a non-deployable status

Field Instruments

No field instruments with the exception of the MERL deploying to the field

*Currently, the MERL is in a non-deployable status

U.S. Nuclear Regulatory Commission

Radiological Emergency Assistance Contacts

NRC Emergency Operations Center Rockville, MD

(301) 816-5100 (301) 951-0550 (backup) (301) 415-0550 (backup) (301) 816-5151 Fax

Region II (AL, FL, GA, KY, NC, PR, SC, TN, VA, VI, WV)

Regional Administrator: Laura Dudes U.S. Nuclear Regulatory Commission Region II Marquis One Tower 245 Peachtree Center Avenue, NE Suite 1200 Atlanta, Georgia 30303-1257

(404) 997-4000 (Main) (404) 997-4907 (Fax)

Region III (IL, IN, IA, MI, MN, MO*, OH, WI)

Regional Administrator: Jack Giessner U.S. Nuclear Regulatory Commission Region III 2443 Warrenville Road, Suite 210 Lisle, Illinois 60532-4351 (630) 829-9500 (Main) (630) 515-1096 (Fax)

Region IV (AK, AR, AZ, CA, CO, HI, ID, KS, LA, MS, MT, ND, NE, NM, NV, OK, OR, SD, TX, UT, WA, WY, Pacific Territories and the Callaway Nuclear Power Plant in MO*)

Regional Administrator:John Monninger(817) 860-8100 (Main)U.S. Nuclear Regulatory Commission(817) 200-1594 (Fax)Region IV1600 East Lamar BoulevardArlington, Texas 76011-4511* Region III is responsible for the entire state of Missouri except the Callaway Nuclear Power Plant.Region IV is responsible for the Callaway Nuclear Power Plant.

NRC Emergency Response Teams are activated to respond to incidents at NRC-licensed facilities by calling the NRC Operations Officer at (301) 816-5100. Team composition depends on the specific facility and includes NRC personnel qualified to respond to an emergency at that facility. Radiological assessment expertise is available upon DOE request.

Tennessee Valley Authority

Radiological Emergency Assistance Contacts

Tennessee Valley AuthorityTVA Operations Duty SpecialistEmergency Preparedness(423) 751-1700 (24-hours)1101 Market Street6B Lookout PlaceChattanooga, Tennessee 37402-28015

Emergency Team Members

Name	Title	Off-Duty Phone
Lee, W. H.	Director, Emergency Preparedness	(423) 751-1700
Parshall, J.M.	Manager, State and Local Programs	(423) 751-1700

Capacity to Dispatch:

Two Environs Radiological Monitoring Teams - two staff per team.

Laboratory and Analytical Programs

Subject to TVA's commitment to its ongoing nuclear power programs, the following services or facilities could possibly be made available as a part of the regional radiation emergency response plan. These are:

- <u>Two (2) Environs Radiological Monitoring Vehicles</u>: TVA has dedicated vehicles for emergency radiological monitoring which are equipped with radio/cellular telephone communications, onboard generators, air samplers and monitoring instruments. Scalers include NaI and GM detectors. Protective clothing, floodlights and items for transportation accident response are onboard.
- 2. <u>Instrumentation Calibration and Repair Facilities</u>: These facilities could be available for limited use.
- 3. <u>TLD Services</u>: Services based at the Sequoyah Nuclear Plant Training and Visitor Center could be available for limited use. TLD services include NVLAP accreditation for Panasonic 710 readers and 802 dosimeters.

SOUTHERN STATES ENERGY BOARD

6325 Amherst Court Peachtree Corners, GA 30092 (770) 242-7712 www.sseb.org

