INTRODUCTION

The purpose of this document is to provide a Model Annex to Emergency Operations Plans to provide planning guidance to State, Local, and Tribal officials for response to transportation incidents involving radioactive materials. This model provides a basic structure and annotated guidance for preparing the Annex. Information appearing in italics provides guidance for planning. Other information within specific sections should be considered as examples only and must be changed -to reflect specific jurisdictional situations and requirements.

This model has been prepared under the assumption that the users will already have a comprehensive Emergency Operations Plan, along with a Radiological Emergency Operations Plan. Guidance for preparing this model was based on FEMA REP 5 and the FEMA State and Local Guide (SLG) 101 Guide for All-Hazard Emergency Operations Planning. These documents may be used for additional information and guidance when developing this plan.

This model was prepared using example information pertinent to County level planning, rather than State level planning. Planners/Procedure Writers may find additional planning information in FEMA-REP-5, Rev. 2.

The following supporting information can be found at the aforementioned locations:

- National Transportation Program
- Materials and Transportation Packaging Descriptions
- Fact Sheets
- Technical Programmatic Dictionary
- Transportation Activities and Maps
- Annex To Emergency Operations Plan

I. PLANNING BASIS

A. Purpose

This part should contain a general statement of the intent of this Annex. To provide for the planning, preparedness and coordination of emergency service efforts to respond to a transportation incidents involving radioactive materials.

B. Scope

This model provides guidance to State, Local, and Tribal officials on the content for developers an Emergency Plan Annex for Transportation Emergencies.

C. Authority

Although the shipper and carrier have the primary responsibility for the safe packaging and transport of radioactive materials, responsibility for the initial response to a transportation incident generally falls to State, Local and tribal officials. The appropriate agencies should, therefore, be prepared to respond to a transportation accident involving radioactive materials. State, Local, and Tribal officials should pre-identify the jurisdiction that will be in charge at the scene of an incident and designate their lead agencies responsible for coordinating and

implementing the emergency planning, preparedness, and response functions. To provide specific direction this section should indicate the legal basis for the emergency operations activities. This could include items as noted below:

(1) County Ordinance No. _____.

(2) Robert T. Stafford Disaster Relief and Emergency Assistance Act, Sub-Chapter 6, Public Law 103-337, Title VI, October 5, 1994.

(3) State Legislative Act (as related to radiological response).

(4) Superfund Amendment and Reauthorization Act of 1986 (Public Law 99-499).

(5) State Code of Laws.

D. Definitions/Acronyms

This part may be used as needed to provide definition and or acronyms relevant to this Annex.

ALARA—As low as reasonably achievable. Guideline for radiation exposure protection.

Buddy System—a method of organizing employees into work groups in such a manner that each employee of the work group is designated to be observed by at least one other employee in the work group. The purpose of the buddy systems to provide rapid assistant to employees in the event of an emergency.

CAS Number—Chemical Abstracts Service Number is a concise, unique means used to identify a chemical. Chemical Abstracts Service indexes information is published in *Chemical Abstracts* by the American Chemical Society and provides index guides by which information about particular substances may be located in the abstracts.

CFR—Code of Federal Regulations - A collection of the regulations established by law. Contact the agency that issued the regulation for details, interpretations, etc.

Control Zones—The areas at a hazardous materials incident that are designated based upon safety and the degree of hazard. Many terms are used to describe the zones involved in a hazardous materials incident. For the purposes of this document, these zones are defined as the hot, warm and cold zones.

Decontamination (Contamination Reduction)—The physical and/or chemical process of reducing and preventing the spread of contamination at a hazardous materials incident.

DOE—US Department of Energy.

Dose—A general term for the quantity of radiation energy absorbed.

Dose Rate —The dose delivered per unit time. It is usually expressed as rads per hour or in multiples or sub-multiples of this unit, such as millirads per hour. The dose rate is commonly used to indicate the level of hazard from a radioactive source.

DOT—US Department of Transportation.

EPA—US Environmental Protection Agency.

ERG—Emergency Response Guidebook - Booklet that provides guidance during the initial phases of transportation emergencies involving all hazardous materials.

Excepted Packaging —Used to transport lower concentrates of radioactivity than those transported in Type A packages.

Exposure—A quantity used to indicate the amount of ionization in air produced by x- or gamma radiation. The unit is the Roentgen (R). For practical purposes, one roentgen is comparable to 1 rad or 1 rem for x- and gamma radiation.

Hazardous Material—A substance capable of creating harm to people, the environment and property.

HMRT—Hazardous Materials Response Team - An organized group of employees, designated by the employer, who are trained and qualified to perform to handle and control actual and potential leaks or spills of hazardous substances.

IC—Incident Commander - The person responsible for all decisions relating to the management of the incident. The incident commander is in charge of the incident scene. This term is equivalent to the on-scene incident commander.

ICS—Incident Command System - An organized approach to control and manage operations at an emergency incident. The OSHA Hazardous Waste Operations and Emergency Response regulations (29 CFR 1910.120 (q) (3)(ii) require that an ICS be implemented by the senior emergency response official on the scene).

LEL—Lower Explosive Limit - Refers to the lowest concentration of gas or vapor (% by volume in air) that burns or explodes if an ignition source is present at ambient temperatures.

mm Hg—A measure of pressure in millimeters of a mercury column above a reservoir.

Monitoring Equipment—Instruments and devices used to identify and quantify contaminants.

MSDS—Material Safety Data Sheet - A fact sheet summarizing information about material identification; hazardous ingredients; health, physical, and fire hazards; first aid; chemical reactivities and compatibilities; spill, leak and disposal procedures; and protective measures required for safe handling and storage.

NFPA—National Fire Protection Association- An international voluntary membership organization formed to promote/improve fire protection and prevention and establish safeguards against loss of life and property by fire.

NIOSH—National Institute of Occupational Safety and Health.

OSHA—Occupational Safety and Health Administration - The U.S. Department of Labor's regulatory and enforcement agency for safety and health.

PPE—Personal Protective Clothing includes both respiratory and physical protection. One cannot assign a level of protection to clothing or respiratory devices separately. These levels were accepted and defined by response organizations such as U. S. Coast Guard, NIOSH, and U.S. EPA.

Level A: Self Contained Breathing Apparatus (SCBA) plus fully encapsulating chemical resistant clothing (permeation resistant).

Level B: Self Contained Breathing Apparatus (SCBA) plus chemical resistant clothing (splash proof).

Level C: Full or half-face respirator plus chemical resistant clothing (splash proof).

Level D: Coverall with no respiratory protection.

Qualified Person—A person with specific training, knowledge, and experience in the area for which the person has the responsibility and/or authority to control.

RAD—Radiation Absorbed Dose is the unit of measure that describes the absorbed dose of radiation. A rad is one way to quantify the amount of energy received.

Radiation Authority—A Federal, state/Tribal agency or state/Tribal designated official. Responsibilities include evaluating radiological hazard conditions during normal operations and emergencies.

Radioactive White-I—0.5 mrem/hr maximum on surface.

Radioactive Yellow-II—50 mrem/hr maximum on surface; 1 mrem/hr maximum at 1 meter.

Radioactive Yellow-III—200 mrem/hr maximum on surface; 10 mrem/hr maximum at 1 meter.

RAP—Radiological Assistance Program maintained by the US Department of Energy.

Rem—Radiation Equivalent Man is a measure of radiation dose related to biological effects.

Strong, Tight Packages—Used to transport materials with extremely low levels of radioactivity. Excepted packaging.

Type A Packages—Used when the amount of activity is less than or equal to the material's A value as specified in 49 CFR 173.435 or 173.433 for mixtures. Used to transport small quantities of radioactive materials with higher concentrations of radioactivity than those shipped in industrial packages. Typically constructed of steel, wood, fiberboard. Type A Package designs undergo more extensive testing than industrial packages.

Type B Packages—Used when the amount of activity is greater than the material's A value as specified in 49 CFR 173.435 or 173.433 for mixtures. Used to transport material with the highest levels of radioactivity. Type B Packages range from small steel drums to heavily shielded, steel casks. Type B Package designs must 5 withstand all the Type A tests as well as a series of severe accident conditions simulated by performance testing and engineering analyses.

UEL—Upper Explosive Limits—The highest concentration of a material in air that produces an explosion or fire or that ignites when it contacts an ignition source.

E. Organizations

Government organizations (i.e., Federal, State, and Local), private sector organizations (i.e., shippers, carriers, industrial, technical, and educational) that are intended to be part of the overall planning and response for transportation incidents should be identified in this section. This section should also identify the organizations with primary response roles and those with supporting roles. A matrix or organization chart should be included. (Appendix A provides examples of organization charts). Organizational points of contact and phone numbers may also be included (or for ease of use, they may be placed in an appendix or tab to this Annex). This section may also delineate whether the responseroles for each organization occur during planning, response and/or recovery phases.

1. Federal Organizations (*ex., DOE, EPA, DOE-RCO, DOT and DOE RAP Team)*

2. State Organizations *(ex., Emergency Preparedness Coordinator, Radiological Response Team, Dept. of Health, Dept. of Environmental Regulation, Office of Solid and Hazardous Waste Management, Dept. of Public Safety, State Police)*
3. Local Organizations *(ex., LEPC, County Emergency Preparedness Coordinator, Fire Dept., Police/Sheriff, EMS)*
4. Private Organizations *(ex. Manufacturing Plants, Nuclear Power Plants, Colleges, Consultants, Shippers, Carriers, Commercial Response Teams, Technical, Educational)*

II. SITUATION/ASSUMPTIONS

The situation/assumptions statement should outline the hazards this annex addresses, what characteristics of the jurisdiction may affect response activities and what information used in preparing the annex must be treated as assumption rather than fact.

State/County, because of the radioactive materials transported and used in other industries, is subject to radioactive materials incidents. The *state/county* is capable of coping with routine incidents, but a major catastrophic incident will require outside assistance.

III. MISSION

The mission statement provides an additional statement of purpose to the Annex.

To provide a well organized emergency service organization to rapidly mobilize and employ, in a coordinated effort, all resources available to contain and neutralize or minimize the disastrous effects of an incident involving radioactive materials. The resources of industry, local, state or federal government, separately or in combination, may be required to cope with the emergency, dependent on the magnitude, nature and area threatened.

IV. EXECUTION

This section provides a description of roles and responsibilities for the responders along with organizational concept of operations. The following roles are examples only, this section should reflect jurisdictional roles and responsibilities beginning with planning and preparedness through response and recovery. In preparing this section, coordination should occur with all tasked organizations (Local, State, DOE, Other Federal Agencies and Private Organizations), to provide information pertaining to the concept of operations.

A. Concept of Operations

This section describes the direction and control relationships of tasked orga nizations. It describes:

- The command structure, specifying who will be in charge during emergency response operations.
- The authorities of, and limitations on, key response personnel such as an IC.
- How emergency response organizations will be notified when it is necessary to respond (Appendix 5 Tab M also provides Notification procedures).

- The means that will be used to obtain, analyze, and disseminate information (for decision making, requesting assistance, reporting, etc.).
- The relationship between the Emergency Operations Center (EOC) and the Incident Command Post (ICP) when used.
- The provisions made to coordinate and communicate among all the jurisdictions and agencies (to include all Federal response agencies) that may be involved in the emergency response. Appendix 5 Tab A provides additional information pertaining to communications.

(1) Radioactive materials incidents may result in radiation dangers or contamination in addition to the potential accident hazards of fire, explosion and toxic fumes. Fire fighting personnel are generally accepted as having the greatest expertise and capability to respond to this type of an accident. However, response to this type of accident requires good planning, procedures and training to combat the dangers present at a radioactive materials transportation accident. *Responders and Planners should consider participating in training and drills to resolve any response concerns and verify the adequacy of the Emergency Plan. Preparedness and planning must include coordination and agreements between all agencies that may be requested to assist during a radioactive material transportation incident. (Appendix 7 will contain copies of agreement letters and mutual aid information). Hazard assessments should be conducted to determine vulnerable areas where radioactive materials may transit. (DOE and the state can assist in providing this information). Response resources such as PPE and monitoring equipment should be evaluated and a determination made as to whether coordination and assistance from outside agencies may be required. The appendices and Tabs to this annex should contain special considerations and plans needed for response to accidents involving radioactive materials.*

(2) Upon occurrence of a radioactive materials accident/incident, overall control of the situation will be as directed by local jurisdiction plans/ordinances in whose area the incident occurs. Immediate notifications will be made to other agencies such as the state and the shipper (DOE) to provide specialized resources for response to radioactive material incidents.

(3) Prior to the arrival of the authority in charge, initial control of the situation and assumption of Incident Command responsibilities will be assumed by the first emergency responder arriving on scene. The on-scene Incident Commander (IC) is authorized to recommend evacuation of the area if required. A Forward Command Post will be established to marshal and manage the personnel and material to combat the hazard. (4) If a state of emergency is declared, the County Emergency Operating Center (EOC) will be activated to coordinate the efforts of the county, municipal, state, Tribal and federal agencies and response personnel. If evacuation is ordered, refer to Section __ of the Emergency Plan for shelter and care of evacuees.

(5) Operation of the forward command post will be in accordance with Appendix 4, this Annex.

B. Tasks

This section will describe the response organizations, the tasks they are responsible for, and the concept of operations for each. Below are examples of a county level task listing. This is to be used only as an example. This section should be prepared to reflect specific jurisdictional organizations and resources. Appendices and Tabs to this annex provide more detailed planning and coordination information.

1. The following actions are common to all fire departments during the phases of operation listed below.

   a. *Pre-Disaster Phase*

      (1) Develop procedures to implement this annex.
      (2) Be prepared to assume control of forward command post if accident is in area of jurisdiction.
      (3) Maintain a training program to cope with radioactive materials accidents/incidents.
      (4) Maintain mutual aid agreements and working relationships with supporting agencies/departments.

   b. *Disaster*

      (1) Assume on-scene control.
      (2) Perform fire fighting duties as needed and as appropriate.
      (3) Order evacuation if the situation warrants.
      (4) Establish monitoring capabilities by utilizing monitors and equipment if available, and/or request assistance from outside agencies such as the State and DOE.
      (5) Keep EOC, if activated, informed of the situation.
      (6) Assist in the decontamination of personnel and equipment as appropriate.

   c. *Recovery Phase*

      (1) Maintain liaison with County EOC/Local Authorities
      (2) Continue to provide fire fighting capabilities.
      (3) Assist in rescue duties as necessary.
      (4) Assist in the decontamination of the area.
      (5) Coordinate final restoration of area and return of evacuees with appropriate officials.

2. The following actions are common to all Rescue and Emergency Medical Services in three phases of operation.

   a. *Pre-Disaster Phase*

      (1) Be prepared to implement applicable procedures.
      (2) Be prepared to conduct rescue and provide on-scene medical attention and transport victims to medical facilities, if necessary.
      (3) Be prepared to establish on-scene command if first on scene.
      (4) Be prepared to support other emergency services in the emergency operations.

   b. *Disaster Phase*

      (1) Maintain liaison with the incident commander, county EOC and medical facilities.
      (2) Conduct rescue operations as required and appropriate.
      (3) Provide on-scene medical attention within capabilities.
      (4) Transport victims requiring further medical attention.

   c. *Recovery Phase*

      (1) Continue liaison with appropriate officials
      (2) Continue to provide rescue medical and transport service as required.
      (3) Assist in the final cleanup and restoration of the area.

3. The following actions are common to all law enforcement agencies in the three phases of operation.

   a. *Pre-Disaster Phase*

(1) Be prepared to implement applicable procedures.
(2) Be prepared to establish incident command if first on-scene.
(3) Be prepared to conduct evacuation if such action is required.
(4) Be prepared to provide security at the scene.
(5) Be prepared to establish evacuation routes.
(6) Be prepared to re-route traffic, if required.

b. Disaster Phase

(1) Establish command post if first on-scene.
(2) Senior official report to on-scene command post for operational coordination.
(3) Establish a safe perimeter as identified by the IC to prevent the spread of contamination and to minimize personnel exposure.
(4) Remove bystanders and control access to area.
(5) Initiate and conduct evacuation if ordered.
(6) Establish evacuation routes and re-route traffic as appropriate.
(7) Assist in rescue operations as appropriate.
(8) Conduct other law enforcement activities as appropriate.
(9) Maintain liaison with EOC and other officials, as appropriate

c. Recovery Phase

(1) Provide security until complete recovery is declared.
(2) Maintain liaison with other officials until recovery is declared.

4. The County Emergency Preparedness Coordinator will initiate the following actions in the three phases of operation.

a. Pre-Disaster

(1) Be prepared to activate County EOC.
(2) Be prepared to implement applicable procedures.
(3) Ensure personnel have received radiological response training.
(4) Conduct hazard assessment of transportation routes.
(5) Evaluate resources and determine outside agencies required for assistance during response.
(6) Coordinate agencies/departments responsibilities and maintain current appendix with alerting list. (see Appendix 2)
(7) Coordinate with state and other agencies whose response could be needed to cope with radioactive materials accident. (Appendix 6)
(8) Maintain close coordination with all emergency service activities to insure county readiness to respond and implement this annex.
(9) Conduct preparedness drills for radiological response.

b. Disaster Phase V

(1) Activate EOC if required.
(2) Coordinate local emergency resources to minimize the effects of a radioactive accident.
(3) Notify the local chief executive and state authorities providing them with the details of the accident/incident.
(4) Coordinate activities of emergency services of county, state and other officials to provide adequate support to the IC to effectively handle the situation.
(5) Coordinate radiological monitoring teams for the ICP to provide for the protection of emergency workers.

(6) The Radiological Officer associated with the Emergency Preparedness Organization will report to the IC and assume control and coordinate the monitoring teams and advise the IC of protective actions, safe perimeters and all matters pertaining to exposure control until a state agency arrives and assumes this responsibility.
(7) Coordinate shelter and care of evacuees as required.
(8) Coordinate outside assistance if needed.
(9) Keep local, state and federal government officials apprised of the situation.
(10) Coordinate preparation of news releases as appropriate.
(11) Coordinate other emergency responses as needed.

c. Recovery Phase

(1) Maintain liaison with IC and other sources until complete recovery has been made.
(2) Coordinate all county activities related to the incident until recovery has been completed and declared.
(3) Coordinate preparation of news releases as appropriate.
(4) Evaluate county emergency responses and actions and be prepared to implement changes in plans or procedures if necessary.

5. State Government

a. Pre-Disaster Phase

(1) Provide planning information in regard to transportation routes for radiological materials to the county LEPC.
(2) Establish a Radiological Response Team to be deployed to accidents involving radioactive materials.
(3) Provide radiological response training to county and local responders.
(4) Provide radiological emergency planning and preparedness assistance to County and Local Governments.

b. Disaster Phase

(1) The state Emergency Preparedness Division will be responsible for coordinating all requests for State and Federal resources which are requested by local governments.
(2) The State Radiological Response Team is responsible for providing professional personnel to the scene for monitoring radiation levels, protective action guides, radiological exposure control, personnel monitoring, and technical advice on decontamination.

c. Recovery Phase

(1) The State Radiological response team is responsible for providing technical advice on containment and disposal of radioactive substances, and will provide a determination of when the area is safe and all radiation hazards have been removed.

6. DOE—Regional Coordinating Office (RCO)

a. Pre-Disaster Phase

(1) Agency should identify regional radiological assistance program (RAP) to protect public health and safety.
(2) Establish and maintain a RAP Team available to respond and assist the public during radiological incidents.

(3) Provide guidelines to RAP Teams for the evaluation of radiological incidents and emergency response to such incidents. *b. Disaster Phase*

(1) Provide assistance to local responders during a radiological transportation accident response through the activation and, if necessary, deployment of the regional RAP Team.
(2) Ensure the RAP Team coordinates with the IC upon arrival at the scene and provides assistance and technical advisory resources for monitoring and decontamination .
(3) Maintains liaison with other DOE RCOs as well as other Federal, State and local organizations during radiological assistance operations.

c. Recovery Phase

(1) Provide advisory assistance for decontamination and site restoration via the regional RAP Team.

7. Shipper

a. Pre-Disaster Phase

(1) The shipper of radioactive materials is responsible for compliance with all DOT regulations pertaining to packaging, labeling, marking, and shipping radioactive materials.
(2) The shipper must maintain a 24 hour emergency response phone number to be contacted in the event of transportation accident which is manned by or in contact with person(s) capable of providing emergency response and accident mitigation information.

b. Disaster Phase

(1) Provide emergency response information to the responding organizations via the 24 hour response number.
(2) Perform all required notifications to local, state, and federal agencies.

c. Recovery Phase

(1) Provide technical assistance during clean up and site restoration.
(2) Provide resources for site cleanup and shipment transportation.

8. Radioactive Material Shipment Carrier

a. Pre-Disaster Phase

(1) The carrier will ensure all drivers are trained in accordance with all applicable regulations.
(2) The carrier will retain capability to deploy a trained and qualified response team to the site of a transportation accident to provide clean up and site restoration services.

b. Disaster Phase

(1) The carrier will notify DOT of the incident.
(2) The carrier will deploy a response team and will coordinate with the shipper and on site responders.

c. Recovery Phase

(1) The carrier will provide alternate transportation resources.
(2) The carrier will ensure all clean up and site restoration operations are completed.

V. ADMINISTRATION AND LOGISTICS

This section addresses the support requirements of the direction and control function.

A. Administration

This section specifies the records that are required to be maintained, identifies the organizations and agencies that have reporting responsibilities, indicates the frequency for reporting, and describes the types of reports that are to be submitted. Reports may include immediate situation reports, as well as, reports of expenditures and obligations, resource consumption and resource shortfalls.

Initial situation reports being made by the on-scene commander to the Division of Emergency Preparedness Coordinator or other response officials should contain but not be limited to, the following:

- Type accident
- Potential hazard
- Casualties incurred
- Nature and extent of assistance required
- Precautionary measures to observe

B. Logistics

This section should address the arrangements that have been made to provide for the support (fuel, equipment, PPE, supplies) needs of the organization performing direction and control functions. (Appendix 3 may provide additional detail.)

The individual fire department or response agency having jurisdiction in whose jurisdiction the accident/incident occurs will utilize existing resources. When all local resources (equipment, personnel and assistance) have been exhausted then the Incident Commander through the use of the Emergency plan will be coordinated the request for additional resources through the County EOC.

VI. DIRECTION AND CONTROL

This section provides the authority and system for direction and control. OSHA's Hazardous Waste Operations and Emergency Response Standard (29 CFR 1910.120) requires that the Incident Command System (ICS) be used for on-scene management of response activities.

- On-scene emergency activities will be directed by the Incident Commander (IC) in whose jurisdiction the accident/incident occurs.
- The County Emergency Operations Center will coordinate with the Incident Commander requests for additional assistance, public information and other support activities.

APPENDICES: I

- Organization Charts
- Alert List
- Resource List
- Incident Command Post
- Radiological Emergency Planning Considerations

(The following tabs are provided as an example and may be modified for specific jurisdictional coordination).

Tab A - Communication
Tab B - Public Information
Tab C - Fire and Rescue
Tab D - Emergency Medical Services
Tab E - Law Enforcement
Tab F - Radiological Monitoring and Decontamination
Tab G - Radiation Exposure Control
Tab H - Medical Monitoring
Tab I - Recovery and Reentry
Tab J - Equipment
Tab K - Radiological Emergency Response Training Exercises and Drills
Tab L - Coordinating Instructions
Tab M - Notification Procedures

- Sources of Information and Agencies with Need to Know
- Letters of Agreement/Mutual Aid

APPENDIX 1 TO ANNEX—ORGANIZATION CHART

This appendix should provide appropriate organization charts, including an Identification of State, County or local governmental emergency preparedness organizations and chain of command. The attached Figure 1 provides an example.

Organization charts may also be provided to delineate primary and support roles for tasked responding organizations and the organization of the response structure.

APPENDIX 2 TO ANNEX—ALERT LIST

The Alert list should provide phone numbers, names, and titles of individuals and organizations that may be called on for emergency response.

I. Fire Departments
II. Police Departments
III. Ems Departments
IV. Hazardous Materials Team
V. State Environmental Protection Agency
VI. County Environmental Protection Agency
VII. School Superintendent
VIII. Others

(*This should include additional state and federal response agencies)*

APPENDIX 3 TO ANNEX—RESOURCE LIST

The resource list should contain both local, readily available resources for response, as well as resources that may be provided by other Local, State and Federal agencies. Resources available from the private sector should also be considered. Resources may include, but are not limited to; response equipment, monitoring devices, vehicles, traffic control, heavy equipment, technical advisory services, personal protective equipment, support equipment, clean up and restoration service, and communications equipment.

I. *County Resources*

II. State Resources

III. DOE RAP Team Resources

IV. Other Available Resources

APPENDIX 4 TO ANNEX—COMMAND POST

This appendix provides procedural information for initial response. This section may be modified to include any other procedural information that may be unique or pertinent to a specific jurisdiction.

_____ COUNTY

In response to a radioactive materials accident, the senior member of the first arriving emergency unit is responsible for assuming the duties and responsibilities of the on-scene commander. They will retain these responsibilities until relieved by the local jurisdiction having authority. They must make an immediate estimate and evaluation of the situation to determine if a disaster or the potential for disaster exists. They will establish a Incident Command Post at a location of their discretion, taking into account the hazards involved, accessibility and space requirement to marshal and manage personnel and material to combat the hazard. If the incident commander determines that a disaster has occurred or is imminent, he will:

- Notify other emergency agencies as appropriate of situation and Command Post location.
- If the situation is critical for impending disaster (explosion, poisonous fumes, high level radiation, etc.), assume authority to declare a state of emergency and/or order immediate evacuation.
- Do not approach radioactive material area until positive identification of the material has been made. If positive identification cannot be made, assume the material to be dangerous.
- Transfer control to local jurisdiction having authority or fire chief as appropriate.
- Conduct appropriate rescue, fire fighting and containment as the situation permits.
- Continue emergency operations until complete recovery has been accomplished.

APPENDIX 5 TO ANNEX—RADIOLOGICAL EMERGENCY PLANNING CONSIDERATIONS

This appendix contains tabs that provide planning information unique to a Radiological transportation incident. These tabs should reference the parallel Emergency Plan sections rather than duplicate information.

Tab A - Communication

Tab B - Public Information

Tab C - Fire and Rescue

Tab D - Emergency Medical Services

Tab E - Law Enforcement

Tab F - Radiological Monitoring and Decontamination

Tab G - Radiation Exposure Control

Tab H - Medical Monitoring

Tab I - Recovery and Reentry

Tab J - Equipment

Tab K - Radiological Emergency Response Training Exercises and Drills

Tab L - Coordinating Instructions

Tab M - Notification Procedures

Tab A—Communication

This tab should provide information pertaining to the establishment of communication links needed during response to a transportation emergency. Due to the specialized nature of potential assisting response agencies, coordination should be planned as to how communications between the various agencies, such as the ICP, State, DOE RCO, and RAP Team shall be managed during an emergency response situation. Consideration should be made as to the compatibility of equipment as well as designation of lines of communication. The lines of communication may be illustrated using a diagram. This tab may reference previously developed procedures for communication during other types of incident response and should contain description of the lines of communication.

Tab B—Public Information

Due to the high visibility of an accident involving radioactive materials, plans should be established for dissemination of public information. A lead public information officer should be designated. Local responders should coordinate with the State radiological public information function and the DOE RCO. Public information at the accident scene will be coordinated through the IC. This Tab should provide pre-disaster, disaster and recovery concept of operations along with roles and responsibilities for public information.

Tab C—Fire and Rescue

Special consideration should be made in regard to procedures for fire and rescue at a transportation accident involving radioactive materials. Personnel should be trained to recognize radiological hazards. Procedures should be developed specific to response to radioactive hazards by fire and rescue organizations. This tab should contain a listing of the unique considerations for radiological transportation accident response.

Tab D—Emergency Medical Services

Planning considerations should be made by emergency medical services for radiologically contaminated victims. Plans and coordination should be developed between the paramedics and hospitals to prepare for the management and care of contaminated victims. Personnel should receive training for radiological hazards and procedures for decontamination of victims, equipment and response personnel. This tab should contain a description of the roles and responsibilities of all medical services organizations.

Tab E—Law Enforcement

Law enforcement personnel should receive training to recognize radiological hazards, and procedures for notification to appropriate agencies in the event of an accident involving radioactive materials. Law enforcement officials will be responsible for traffic control and area security. Coordination agreements, roles and responsibilities for local, County and State law enforcement agencies should be provided in this tab.

Tab F—Radiological Monitoring and Decontamination

Consideration should be made by response organizations as to resources available for radiological monitoring. Planning should be conducted to determine what agencies will conduct monitoring. Many county agencies have monitoring equipment as well as the state and DOE RAP teams. Coordination agreements and roles between these agencies should be recorded in this tab. Procedures and considerations for monitoring and decontamination may also be included.

Tab G—Radiation Exposure Control

Plans should be provided for evacuation of the incident area. Recommended evacuation distances are contained in the North American Emergency Response Guidebook. Response personnel should cordon off the area and ensure as few personnel as necessary enter into this zone. The evacuation plan provided in the Emergency Plan may be referenced with special considerations for radioactive materials in this tab.

Tab H—Medical Monitoring

Plans should be provided for long term medical monitoring of contaminated response personnel and victims. The responsibility and procedures for the monitoring program should be included in this section.

Tab I—Recovery and Reentry

This tab should contain a description of agencies tasked with determining when the site is safe for reentry. Typically the state radiological monitoring team will advise the IC of reentry safety. This tab should also contain the criteria for recovery.

Tab J—Equipment

Consideration of equipment needed for response to a radiological incident should be made. The list of resources in Appendix 3 should be reviewed to determine the adequacy of equipment. This tab may also contain plans for maintaining equipment specific to radiological response.

Tab K—Radiological Emergency Response Training Exercises and Drills

This tab should contain a listing of resources available for training, agencies who may be available or who may conduct exercises in which personnel may participate. A training plan for response personnel should be prepared.

Tab L—Coordinating Instructions

This tab should contain instruction for review and update of this Annex.

Tab M—Notification Procedures

This tab should contain radiological specific notification procedures. For example, the state radiological response team must be called in the event of an accident involvingradioactive materials. Any other notifications that may be required should be included also, such as those to DOE RCOs.

APPENDIX 6 TO ANNEX—SOURCES OF INFORMATION/ASSISTANCE

This appendix provides example contacts and phone numbers for sources of information and assistance that may be called upon during a radiological transportation accident.

SOURCE	TELEPHONE
n Bureau of Explosives (Association of American Railroads)	1-202-639-2222
n Chemical Transportation Emergency Center (CHEMTREC)	1-800-424-9300
n U.S. Environmental Protection Agency ("Right to Know" Hotline)	1-800-535-0202
n Regional RAP Team	
n Department of Energy (DOE) Administration	
n Local Government: (Sheriff Police Fire Department Ambulance Service County Council)	911
n Local Emergency Preparedness Agency	
n State Emergency Preparedness Agency	
n State Health and Environmental Regulatory Agencies, Hazmat and Radiological Response Teams (to be completed as state specific)	
n State Dept. of Natural Resources	
n State Dept. of Public Safety (Statewide)	
n U. S. Dept. of Transportation	
n Poison Control	

APPENDIX 7 TO ANNEX—LETTERS OF AGREEMENT/ MUTUAL AID

This section should contain copies of letters of agreement and mutual aid for all outside agencies that may be called upon for assistance.