

State Planning Standards Checklist for Annex D, Radiation Protection

Jurisdiction(s): City of Beaumont

Annex Date: August 29, 2012 _____ **Date of most recent change, if any:** _____

(The date which appears on the signature page)

Note: The annex will be considered Deficient if the *italicized* standards are not met.

This Annex shall:	Section/paragraph
I. Authority	
D-1. Identify local, state, and federal legal authorities pertinent to the subject of the annex, in addition to those cited in the basic plan.	I
II. Purpose	
D-2. Include a purpose statement that describes the reason for development of the annex.	II
III. Explanation of Terms	
D-3 Explain and/or define terms and acronyms used in the annex.	III
IV. Situation & Assumptions	
D-4. <i>Include a situation statement related to the subject of the annex or refer to the general situation statement in the basic plan.</i>	IV.A
D-5. <i>Acknowledge compliance with the National Incident Management System (NIMS) principles and protocols.</i>	IV.A.1.c
D-6. <i>Include a list of assumptions used in planning for radiological incidents.</i>	IV.B
V. Concept of Operations	
D-7. <i>Describe the local concept of operations for dealing with emergency situations involving radiological materials.</i>	V.A, B, C
D-8. <i>Describe how protective actions for emergency responders and the public will be determined and implemented.</i>	V.B.4
D-9. <i>Describe how notification of radiological incidents will be made to local, state, and federal authorities.</i>	V.B.2 & 5
D-10. <i>Describe how state and federal assistance will be obtained if it is needed.</i>	V.B.6
D-11. <i>Include a radiological incident response checklist or make reference to a similar checklist in another part of the plan.</i>	Appendix 2
D-12. Include a list of radiological protection actions to be taken during each phase of emergency management.	V.D
VI. Organization & Assignment of Responsibilities	
D-13. <i>Describe or depict the organization that will be utilized to provide radiological protection.</i>	VI.A
D-14. <i>Include assignments of radiological protection tasks to individuals (by position), departments, or agencies.</i>	VI.B
VII. Direction & Control	
D-15. <i>Identify by position the individual(s) who will oversee radiological protection operations on a daily basis and during emergency situations.</i>	VII
VIII. Readiness Levels	
D-16. <i>Describe actions to be taken at various readiness levels.</i>	VIII

IX. Administration & Support		
D-17. Include policies on maintaining/preserving records and training.		IX
X. Annex Development & Maintenance		
D-18. Specify the individual(s) by position responsible for developing and maintaining the annex.		X.A
XI. References		
D-19. List references pertinent to the content of the annex.		XI
Other		
D-20. <i>Include an inventory of radiological instruments or make reference to another portion of the plan which includes that information.</i>		Appendix 1
D-21. <i>Describe radiological response training requirements and identify sources of training.</i>		Appendix 4
D-22. <i>Where appropriate, outline procedures for responding to incidents at fixed nuclear facilities or planned radiological shipments or make reference another part of the plan that includes these procedures.</i>		Appendix 5

FOR LOCAL GOVERNMENT USE		Signature	Date
This Checklist Completed By		<i>Carmen Gypke</i>	9/4/2012

FOR DEM USE	Initials	Date
DEM Regional Liaison Officer Review		
DEM Preparedness Section Processing		

ANNEX D

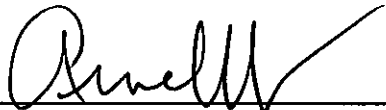
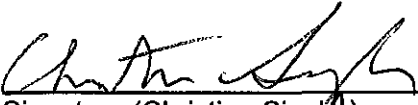
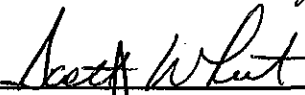
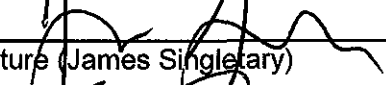

RADIOLOGICAL PROTECTION

CITY OF BEAUMONT

APPROVAL & IMPLEMENTATION

Annex D

Radiological Protection

 Signature (Anne Huff)	Fire Chief	<u>8/14/2012</u> Date
 Signature (Christian Singler)	Fire-Operations Section Chief	<u>8/23/2012</u> Date
 Signature (Scott Wheat)	HazMat Program Manager	<u>8/23/2012</u> Date
 Signature (James Singletary)	Chief of Police	<u>8/29/2012</u> Date
 Signature (Tim Donaschek)	EMC	<u>8/29/2012</u> Date

NOTE: The signature(s) will be based upon local administrative practices. Typically, the first signature block is used by the individual having primary responsibility for this emergency function and the second signature block is used by the Emergency Management Director or the Emergency Management Coordinator. Alternatively, each department head assigned tasks within the annex may sign the annex.

RECORD OF CHANGES

Annex D

Radiological Protection

Reviewed by Planning Committee Members:

Scott Wheat, Fire-Rescue
Carman Apple, Emergency Management
Jim Clay, Law Enforcement
Bart Bartkowiak, Technology Services
Glenda Piazza, Emergency Management

Also Reviewed by:

Anne Huff, Fire-Rescue
Christian Singler, Fire-Rescue
Calvin Carrier, Fire-Rescue
Jeff McNeel, Fire-Rescue
Keith Nolen, Fire-Rescue
Joseph Condina, Fire-Rescue
Jack Maddox, Fire-Rescue
Keith Stewart, Fire-Rescue
Danny Cross, Fire-Rescue
Brad Penisson, Fire-Rescue
Pat Grimes, Fire-Rescue

Planning Committee Meeting/Discussion Dates: March 30, 2012

EMC Review Date: May 30, 2012

Asst. EMC Review Date: August 3, 2012

Change #	Date of Change	Entered By	Date Entered
1	08/2012	Anne Huff	08/2012

ANNEX D

RADIOLOGICAL PROTECTION

I. AUTHORITY

- A. Refer to Section I of the Basic Plan for general authorities.
- B. OSHA Regulation 29 CFR 1910.120, *Hazardous Waste Operations and Emergency Response*.
- C. Annex D, Radiological Emergency Management, to the *State of Texas Emergency Management Plan*.

II. PURPOSE

The purpose of this annex is to define organizational concepts and procedures, establish the local organization, and to assign responsibilities for an effective operational radiological protection program (RPP) for both preparation and response to a radiological emergency affecting the City of Beaumont. This will allow our jurisdiction to provide a coordinated response to emergencies involving radioactive materials and for determination and implementation of local measures to protect life, property, and the environment during the course of the event.

III. EXPLANATION OF TERMS

ARO	Assistant Radiological Officer
DOE	(US) Department of Energy
DHS	Department of Homeland Security
DPS	Department of Public Safety
DSHS	Department of State Health Services
EOC	Emergency Operations Center
EMC	Emergency Management Coordinator
EMS	Emergency Medical Services
FEMA	Federal Emergency Management Agency
TDEM	Texas Division of Emergency Management
OSHA	Occupational Safety and Health Administration
IC	Incident Commander
ICP	Incident Command Post
ICS	Incident Command System
NDA	National Defense Area
NIMS	National Incident Management System
NRC	Nuclear Regulatory Commission
NSA	National Security Area
RCP	Radiation Control Program
RO	Radiological Officer
RPP	Radiation Protection Program

RRC	Railroad Commission
SMRAP	Southern Mutual Radiation Assistance Plan
SOP/SOG	Standard Operating Procedures/Standard Operating Guidelines
TLETS	Texas Law Enforcement Telecommunications System
TxDOT	Texas Department of Transportation

IV. SITUATION & ASSUMPTIONS

A. Situation

1. General.

- a. See the general situation statement and hazard summary in Section IV. A. of the Basic Plan.
- b. Radioactive materials are hazardous materials that receive special coverage in State and federal laws and regulations covering such materials. However, radiological materials are also subject to a number of specific State and federal laws and regulations that control the handling and use of such materials, and plans that establish unique State and federal procedures for handling incidents involving them. In addition, the State and federal agencies that provide advice and assistance to local governments during radiological incidents differ from those that provide advice and assistance during most other hazardous materials incidents.
- c. Except for radiological incidents involving federal facilities or federally-owned nuclear materials, the State or local government has the responsibility for taking required emergency response actions. Response within the City of Beaumont will be in compliance with the National Incident Management System (NIMS) operating principles and protocols, and will constitute general guidance for all responders to the radiological incident. Support may be requested from federal agencies pursuant to the National Response Framework (NRF). The Department of Homeland Security (DHS) has overall responsibility of all actual and potential Incidents of National Significance and accidents or incidents involving nuclear or radioactive materials that may or may not rise to the level on an Incident of National Significance. Various federal coordinating agencies will lead the response to incidents of lesser severity by coordinating federal radiological monitoring assistance to State and local governments.
- d. The Department of State Health Services, Radiation Control Program (DSHS/RCP), as the State radiation control agency, has primary responsibility for the State radiological protection program. DSHS/RCP also provides Statewide training for ROs and radiological monitors.
- e. The federal agency responsible for accidents at nuclear facilities licensed by the State of Texas or incidents involving shipments of radioactive materials licensed by the State is the Nuclear Regulatory Commission (NRC). The US Department of Energy (DOE) and Department of Defense (DOD) have the lead federal role in incidents at their facilities or accidents involving their shipments. Each of these

federal agencies in addition to the United States Coast Guard (USCG), the Environmental Protection Agency (EPA), and the National Aeronautics and Space Administration (NASA) may serve as a coordinating agency for DHS.

- f. Additional external resources may be available and requested by the State of Texas in accordance with the Southern Mutual Radiation Assistance Plan (SMRAP).
2. **Radiological Hazards.** This jurisdiction is susceptible to accidents involving radioactive materials at fixed sites and in transport. Hospitals and medical facilities use a wide range of radioactive sources in nuclear medicine, as well as, in research and development programs. Radioactive sources are used to x-ray pipe welds, in well logging, and for many other common industrial and business uses. These sources can be extremely hazardous (life threatening) when removed from their containers, either intentionally or by accident. A variety of radioactive materials are transported on our highways and rail systems, sometimes in unmarked vehicles. Additionally, radioactive materials may be present on some aircraft.
3. **Radiological Increased Control.** This jurisdiction has licensees that possess sources containing radioactive material quantities of concern. Examples are presented in the previous paragraph. DSHS mandates increased controls to reduce the risk of unauthorized use of radioactive materials. The applicable facilities are required to have a pre-arranged plan with the Local Law Enforcement Agency (LLEA) for assistance in response to an actual or attempted theft, sabotage, or diversion of such radioactive materials. The City of Beaumont will participate in this program.

B. Assumptions

1. We may experience radiological emergency situations, which may threaten public health and safety, private or public property and/or the environment, which will necessitate the implementation of protective actions for the public-at-risk.
2. A nuclear attack against the United States is considered highly unlikely. The deliberate release of radioactive materials by criminals or terrorists in the local area is possible, but considered unlikely.
3. Proper development and execution of a RPP can significantly reduce the number of casualties that could result from a radiological accident. A combination of trained local radiological personnel, operational detection equipment and containment/decontamination equipment and facilities should be available to detect, assess the threat posed by, and contain radiological accidents.
4. We must be prepared to carry out the initial emergency response on an independent basis. If our resources alone are inadequate to cope with a radiological incident we may request State assistance through our Disaster District. The DSHS/RCP, as the State radiation control agency, will provide advice and assistance to local personnel in responding to an incident involving an actual or suspected radiological release.
5. Local emergency operations, including the use of mutual aid resources, will be directed by local officials, except in those situations where State or federal law requires that a State or federal agency exercise lead responsibility or where local responders

lack the necessary expertise and/or equipment to cope with the incident and agree to permit those with the expertise to take charge.

6. The State may request supplemental emergency assistance from other states or from the federal government when local and state resources are insufficient to deal with the emergency.

V. CONCEPT OF OPERATIONS

A. General

1. A basic local radiation protection program (RPP) consists an incident response capability that includes one or more Radiological Officers (ROs) to manage the program and trained radiological monitors equipped with appropriate radiation detection and communication equipment and the of the Emergency Operations Center (EOC) to support field operations.
2. To conduct an effective RPP, we will:
 - a. Maintain information on radiological monitoring instruments by type, number, location, and owner. We own radiation detection equipment and possess radiation detection equipment on loan from the State. See Appendix 1 for a list of radiological monitoring resources within our jurisdiction.
 - b. Establish procedures for initial emergency response to radiological accidents. See the Radiological Incident Response Checklist in Appendix 2.
 - c. Establish a radiological incident reporting system. See Appendix 3.
 - d. Appoint personnel and provide training to local emergency responders, emergency management personnel, ROs, and radiological monitors. See Appendix 4.
 - e. Establish procedures for decontamination and recovery operations.

B. Radiological Accidents

1. Discovery. Radiological accidents may be discovered by the public, by businesses that use or transport such materials, or by local responders who are summoned to an accident site. Local personnel are likely to be first emergency responders on the scene of a radiological accident. The first local emergency responder at the scene will take charge, initiating the incident command system (ICS), and serve as the Incident Commander until relieved by a more senior or more qualified individual.
2. Local Notification. The initial Incident Commander shall make an assessment of the situation, to include an estimate of the likelihood of a release of radiological materials. The initial Incident Commander will gather initial information (found on the Hazardous Materials Incident Guide Card in Appendix 3), communicate this information to the Fire-EMS Communications Center or 911 Operations Center, and request additional

assistance as needed. If it appears that radiological materials have been released into the environment or such a release appears likely, the EOC may be activated to support the incident response.

3. **Response Actions.** The Incident Commander, in coordination with the Operations Section Chief and Hazmat Branch Director, should identify response resources required and direct the on-scene response to contain or prevent spread of contamination at the incident site. The initial response should be accomplished in accordance with established hazardous materials response criteria and the general checklist in Appendix 2. At least one trained RO or radiological monitor should participate in the response to a known or suspected radiological incident.
4. **Protective Actions.**
 - a. **Short Term.**
 - 1) If it appears that a release of radiological materials has occurred or is possible, the Incident Commander is responsible for determining and implementing appropriate protective actions for the public in the immediate area of the incident. The Incident Commander is also responsible for advising personnel responding to the incident of potential hazards and determining requirements for personal protective equipment (PPE). Responders who lack appropriate hazardous materials training and appropriate PPE should not be committed to radiological incidents.
 - 2) If it appears that a radiological release has or may affect areas beyond the incident site, the Incident Commander should coordinate with the EOC to agree upon a division of responsibilities for warning the public, making required notifications, implementing protective actions for the public in areas beyond the incident site, and obtaining additional resources and technical assistance.
 - 3) Suitable initial public protective actions for a radiological incident may include evacuation and/or sheltering in place. Appendix 4 to Annex Q, Hazardous Materials & Oil Spill Response provides additional information on selecting public protective measures.
 - b. **Long-term Protective Measures.** DSHS/RCP will normally conduct a detailed incident assessment, identify affected areas through radiological monitoring, recommend follow-on protective measures to protect public health, and oversee recovery operations. Long-term protective measures may be implemented by DSHS or other State regulatory agencies and may include controls on the movement and use of livestock, foodstuffs, milk, and feed from contaminated areas and on the use of drinking or irrigation water from contaminated sources.
5. **State and Federal Notifications.** The Fire-EMS Communications Center, 911 Operations Center or the EOC, if activated, shall be responsible for making required emergency notifications to State and federal agencies. Radiological releases should be reported to the:

- a. Local Department of Public Safety (DPS) office in Beaumont, at 7200 Eastex Freeway, which is the same location as the Disaster District Committee (DDC). The DDC will relay information to the Texas Division of Emergency Management at the State Operations Center (SOC).
- b. DSHS/RCP at 512-458-7460 (24-hour).
- c. State Environmental Hotline at 1-800-832-8224.
- d. National Response Center at 1-800-424-8802.
- e. Local FBI office in Beaumont at 2615 Calder, if the incident involves a deliberate release of radiological materials.

See Appendix 3, Texas Radiological Incident Reporting System and Hazardous Materials Incident Guide Card, for additional information.

6. **State & Federal Assistance.** The DSHS/RCP staff in Austin has the capability to provide advice by telephone directly to the Incident Commander or to the EOC until DSHS/RCP personnel arrive on the scene. The EOC, if activated, may be responsible for coordinating with the DSHS/RCP to obtain technical advice and assistance regarding radiological issues. The DSHS/RCP may formulate requests for the Governor for additional radiological monitoring and assessment assistance from the federal government or from other states, if required. The Mayor may request other types of State assistance through the Disaster District Committee Chairperson.
7. **Situation Updates.** The Incident Commander will provide situation updates to the EOC, if activated; the EOC will prepare and transmit situation reports to the Disaster District. See Annex N for guidance on situation reporting.
8. **Monitoring of Emergency Workers.** On-site medical monitoring, exposure follow-up and associated records will be provided for responders who have entered contaminated areas.
9. **U.S. Government Nuclear Materials.** In the event of a radiological accident involving nuclear weapons, special nuclear material (SNM), or classified components, the federal agency, which owns that material may declare a National Defense Area (NDA) or National Security Area (NSA) around the site and take exclusive control within that area. NDAs and NSAs are established to safeguard classified information or restricted data, equipment, or material.

C. Deliberate Acts

The deliberate release of radioactive materials is a crime under a number of State and federal laws. Any incident of this type must be promptly reported to local and State law enforcement agencies. The Federal Bureau of Investigation (FBI) has lead responsibility for criminal investigations of terrorist acts or terrorist threats involving weapons of mass destruction (WMD), including improvised radiological dispersion devices; the Department of Public Safety (DPS) is the lead State agency. The DHS is responsible for overall coordination of all actual and potential Incidents of National Significance and accidents or incidents involving radiological materials that may or may not rise to the level of an Incident

of National Significance; TDEM is the lead State agency. If a release of radiation is believed to be an act of terrorism, we will ensure the incident is reported to both to the Texas Department of Public Safety (DPS) and the FBI. More information on dealing with terrorist events is provided in Annex V, Terrorist Incident Response.

D. Activities by Phases of Emergency Management

1. Prevention - Maintain an effective public warning system.
2. Preparedness
 - a. Establish a RPP system.
 - b. Select and train RPP personnel.
 - c. Ensure responders have data available on local facilities that are licensed to use, store, or transport radiological materials. This information may be obtained from the DSHS/RCP.
 - d. Ensure radiation detection instruments are available and operational.
 - e. Educate the public about radiological hazards and protective actions.
3. Response
 - a. Activate the RPP system.
 - b. Respond in accordance with the guidelines in Appendix 2.
 - c. Provide information and instructions to the public.
4. Recovery
 - a. Ensure radiation source material is removed and ensure access to contaminated areas is controlled until they are cleaned up. Cleanup will normally be performed by a contractor supervised by State or federal agencies and paid for by the responsible party, if one can be located.
 - b. Work with State and federal agencies to assess damage, if any.
 - c. Work with the DSHS/RCP to continue area radiation monitoring, if required.
 - d. Work with the DSHS/RCP to determine the cause of the incident and determine liability.
 - e. Keep the public informed about the status of the incident.

VI. ORGANIZATION & ASSIGNMENT OF RESPONSIBILITIES

A. Organization

1. The Radiological Officer (RO) is in charge of the RPP on a day-to-day basis. Once a radiological accident occurs, responsibility for managing and directing the response is assigned to the Incident Commander and responsibility for coordinating external support is assigned to the EOC staff.
2. Effective response to a radiological incident requires a coordinated response by local departments, agencies, and officials, together with representatives of the facility or company responsible for the incident, augmented, in certain circumstances, by State and federal agencies with responsibilities for radiological incidents. Technical assistance for a radiological incident may be provided by the facility, by State and federal agencies, or by industry. See paragraph V.B.6, in this annex for more information on State and federal assistance.

B. Assignment of Responsibilities

1. The Fire Chief will designate one or more Radiological Officers to coordinate all radiological protection program activities.
2. The Incident Commander (IC) will:
 - a. Manage emergency response resources and operations at the incident site to control the incident.
 - b. Determine and implement protective actions for emergency responders and the public in the vicinity of the incident site.
3. Fire Department will:
 - a. Provide personnel and equipment to contain or control radiological incidents.
 - b. Implement initial radiological monitoring needed to assess the situation and determine protective actions. State or federal agencies may provide follow-on radiological monitoring assistance.
 - c. Implement initial decontamination where needed. Large-scale decontamination, if needed, may be coordinated by State or federal agencies.
 - d. Assist in evacuation, if necessary.
4. The Radiological Officer will:
 - a. In January of each year, obtain a current listing of local licensed users of radiological materials from DSHS/RCP, maintain a copy of that list, and provide copies to emergency response elements for use in operational planning.

- b. Ensure a sufficient number of radiological detection instruments are in-place and operational.
 - c. Ensure selected emergency responders are provided training in radiological monitoring.
 - d. Schedule and conduct an annual review of this annex and coordinate update of the annex, if needed.
 - e. If necessary, appoint an assistant radiological officer to perform duties in his/her absence.
5. Law Enforcement will:
- a. Restrict access to incident sites and contaminated areas to protect public health and safety.
 - b. Organize and conduct evacuations and provide traffic control as needed, if necessary.
 - c. Assist the Fire Department with initial radiological monitoring as needed to assess the situation and determine protective actions.
 - d. Assist in warning the public, as necessary.
 - e. If the release of radiation appears deliberate, control the scene, apprehend suspects, conduct an investigation, and if, the incident appears to be terrorism-related, ensure DPS and the FBI are advised.
6. Public Health/EMS will:
- a. Provide medical care and transportation for casualties.
 - b. Alert hospitals of the potential for contaminated victims.
7. Hospital(s) will:
- a. Provide medical care for casualties as needed.
 - b. Be prepared to decontaminate contaminated patients.
8. Other Departments & Agencies will:
- a. Provide personnel, equipment, and supplies requested to support emergency operations.
 - b. Provide technical assistance to the Incident Commander and the EOC upon request.
 - c. In accordance with established procedures, provide personnel to staff the Incident Command Post (ICP) or EOC, if activated.

VII. DIRECTION & CONTROL

- A. Guidance.** The Mayor or designee may establish local policies relating to radiological protection and may provide general guidance for emergency operations.
- B. Program Management.** The RO will carry out day-to-day management of the RPP.
- C. Operational Direction.** During radiological incidents, the IC, with the assistance of the Operations Section Chief and Hazmat Branch Director, will manage radiological response operations at the incident site. The IC and the EOC shall agree upon a division of responsibilities for specific tasks. Typically, the EOC will conduct support operations, including activating additional resources and requesting external resources, making required notifications and reports, coordinating large scale evacuations and area traffic control, disseminating emergency public information, and other tasks to support emergency operations.
- D. Communications.** Telephone, radio, teletype, e-mail, and/or facsimile will be used to transmit reports of radiological incidents, obtain technical assistance, exchange information, and provide direction and control.

VIII. READINESS LEVELS

Most radiological incidents typically occur without warning. Hence, developing a systematic set of increased readiness actions is difficult.

A. Level IV - Normal Conditions.

See the prevention and preparedness activities in Section V.D., Emergency Management Activities by Phase.

- B. Level III - Increased Readiness.** Increased Readiness may be appropriate if there is a greater than normal threat of a radiological incident. Initiating conditions may include a radioactive source missing in our region, notification that a significant radioactive shipment will be transiting our area, or a significant change in the Homeland Security Threat Level due to a radiological threat. Level 3 readiness actions may include:

1. Monitoring the situation.
2. Informing first responders of the situation.
3. Ensuring the Hazardous Materials Response Team (if available) is aware of the situation and can respond if necessary.

- C. Level II - High Readiness.** High Readiness may be appropriate if there is an increased risk of a radiological incident. Initiating conditions may include a significant radiological shipment is transiting through our area, a radioactive source is missing in our jurisdiction, or

notification of a significant change in the Homeland Security Threat Level due to a specific radiological threat. Level 2 readiness actions may include:

1. Monitoring the situation.
2. Alerting personnel for possible emergency duty and deploying personnel and equipment to investigate incidents.
3. Checking equipment and increasing short-term readiness if possible.
4. Issuing public warning and providing public information if necessary.

D. Level 1 - Maximum Readiness. Maximum readiness is appropriate when there is a significant possibility of a radiological release. Initiating conditions might include a lost radioactive source being located in the local area, activation of radiological alarms at a landfill screening point, an incident at a facility licensed to use radiological materials, or notification of a significant change in the Homeland Security Threat Level due to a specific radiological threat addressing this jurisdiction or facilities possessing radioactive materials. Level 1 readiness actions may include:

1. Investigating the situation and partially or fully activating the EOC to monitor it.
2. Placing first responders in alert status; placing off-duty personnel on standby.
3. Advising appropriate State and federal agencies.
4. Preparing to issue and issuing public warning if it becomes necessary.

IX. ADMINISTRATION & SUPPORT

A. Agreements & Contracts

Should our local resources prove to be inadequate during an emergency; requests will be made for assistance from mutual aid agreements, State and/or federal agencies, and industry in accordance with existing mutual-aid agreements and contracts.

B. Reports & Records

1. **Situation Reports.** If there has been an actual release of radioactive materials, the EOC should prepare and disseminate a periodic situation report to State and federal agencies, through the DDC, until the situation is resolved. It may be desirable to also disseminate this report to nearby jurisdictions and to those cities or counties that are providing mutual aid resources. See Annex N, Direction and Control, for the format of and instructions for this report.
2. **Activity Logs.** The ICP and the EOC shall maintain accurate logs recording key response activities; activities to be logged are outlined in Section IX of our Basic Plan.

3. **Response & Recovery Expenses.** Since it may be possible to recover some expenses incurred in responding to a release of radiological materials from the responsible party, insurers, or the federal government, each department or agency shall maintain detailed records of labor costs, equipment usage, and supplies expended to respond to or recover from an actual radiological release.
4. **Post-Incident Review.** A post-incident review shall be conducted in the aftermath of any incident that resulted in an actual release of radiological materials.

C. Maintenance of Radiological Equipment

1. All radiological monitoring devices owned by the City of Beaumont will be maintained in accordance with the manual of instructions for those instruments.
2. State-owned instrument sets obtained from DSH/RCP are normally exchanged periodically by the DSHS/RCP so they can be serviced and calibrated. The RO will coordinate instrument exchanges, calibrations, and any out-of-cycle maintenance requirements for State-owned instruments with DSHS/RCP.

D. Training

Federal law requires that individuals, who respond to hazardous materials incidents, including radiological incidents, should be adequately trained and equipped for the tasks they will perform. Training is available through a combination of federal, State, and local sources; see Appendix 4.

X. PLAN DEVELOPMENT & MAINTENANCE

- A. Development.** The Fire Chief and Radiological Officer in cooperation with the EMC are responsible for developing and maintaining this annex.
- B. Maintenance.** This annex will be reviewed annually and updated in accordance with the schedule outlined in Section X of the Basic Plan.

XI. REFERENCES

U.S. Department of Transportation and Transport, *Emergency Response Guidebook*.

FEMA, *Guide for All-Hazard Emergency Operations Planning*, SLG-101.

FEMA, *Guidance for Developing State, Tribal, and Local Radiological Emergency Response Planning and Preparedness for Transportation Accidents*, FEMA-REP-5.

APPENDICES:

Appendix 1 Radiological Instrument Inventory
 Appendix 2 Radiological Incident Response Checklist

Appendix 3Texas Radiological Incident Reporting System
Hazardous Materials Incident Guide Card
Appendix 4Radiological Response Training & Instruments

RADIOLOGICAL INSTRUMENT INVENTORY
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Type of Instrument	Number In Stock	Location (Office, Vehicle)	City	Owner (Local/State)
777-1¹	1	<i>Beaumont Fire</i>	Beaumont	State
	3	<i>Beaumont PD</i>	Beaumont	State
	1	<i>Lamar Univ.</i>	Beaumont	State
	2	<i>TCEQ</i>	Beaumont	State
	10	<i>DPS</i>	Beaumont	State
	1	<i>Tx-DOT</i>	Beaumont	State
	1	<i>Tx-DOT Office</i>	Beaumont	State
2241-2RK KIT Model 14C	1	<i>Beaumont Fire</i>	Beaumont	Local
	1	<i>Beaumont PD</i>	Beaumont	Local
44-9-M DET. For the Model 14C (Ludlum)	1	<i>Beaumont Fire</i>	Beaumont	Local
	1	<i>Beaumont PD</i>	Beaumont	Local
44-2 Gamma For the Model 14C	1	<i>Beaumont Fire</i>	Beaumont	Local
	1	<i>Beaumont PD</i>	Beaumont	Local
APD-2000	1	<i>Beaumont Fire</i>	Beaumont	Local
	1	<i>Beaumont PD</i>	Beaumont	Local
Canberra mini radiacs	6	<i>Beaumont Fire</i>	Beaumont	Local

¹ Type 777-1 includes one CDV-700 and one CDV-715

RADIOLOGICAL INCIDENT RESPONSE CHECKLIST

	Action Item	Assigned
	1. If the situation requires it, isolate the site and deny access. <ul style="list-style-type: none"> • Use emergency vehicles, barricades, barrier tape, etc. 	
	2. Classify incident, provide basic situation information to dispatch, and identify response resources required. See Incident Classification page 3, of this appendix. <ul style="list-style-type: none"> • Level III – Incident • Level II – Emergency • Level I – Disaster 	
	3. Gather information included in the Hazardous Materials Guide Card (Appendix 3) and provide it to the Fire-EMS Communications Center or 911 Operations Center.	
	4. The Fire-EMS Communications Center or 911 Operations Center should deploy forces in accordance with their SOGs, and relay situation information to each other, emergency responders, and the EMC.	
	5. Determine extent of danger to responders and establish requirements for personal protective equipment (PPE) and specialized response equipment. See Response Personnel Safety in Annex Q, Appendix 4.	
	6. Ascertain extent of danger to general public; determine specific areas and special facilities (schools, hospitals, nursing homes, prisons, and other institutions), if any, at risk.	
	7. Develop action plan to contain and control the release of radiological material.	
	8. Determine appropriate protective actions for the public and special facilities. See Annex Q, Appendix 4. If evacuation is contemplated, see the General Evacuation Checklist in Annex E, Evacuation.	
	9. Initiate warning and issue protective action recommendations for the general public. See Annex A, Warning, and Annex I, Emergency Public Information.	
	10. Warn special facilities, provide protective action recommendations and instructions, and determine requirements for assistance. Provide assistance requested.	
	11. If evacuation will be conducted, provide traffic control and be prepared to provide transportation to those who need it.	
	12. Warn other communities that may be threatened by the radiological release.	
	13. If possibility exists of casualties that are contaminated with radiological material, ensure EMS units and hospitals are so advised.	
	14. If evacuation is recommended, staff and open temporary shelters for evacuees. See Annex C, Shelter and Mass Care.	

	Action Item	Assigned
	<p>15. Notifications: See Appendix 3 for notification procedures and telephone numbers. The DSHS/RCP must be contacted for radiological accidents. They can provide assistance as needed. See paragraph V.B.6, in this annex.</p> <ul style="list-style-type: none"> • Advise the responsible party to report release to State and federal authorities as required by State and federal statutes and regulations. • If the City of Beaumont is responsible for the release, it must make required notifications to State and federal agencies. • If the responsible party cannot be identified/located, the City of Beaumont should make required notifications, making it clear that the responsible party is presently unknown. 	
	16. If water or wastewater systems are threatened by radioactive contamination, advise system operators so they may implement preventative measures.	
	17. If on-scene technical assistance is required, request assistance from industry or appropriate State or federal agencies.	
	<p>18. If additional response resources are required, request them.</p> <ul style="list-style-type: none"> • Invoke mutual aid agreements. • Summon Hazmat/environmental response contractor, if one is under contract. • Request assistance from the State through the Disaster District. 	
	19. Provide updated information on the incident to the public through media releases.	
	20. Document actions taken, resources committed, and expenses incurred.	
	21. Retain message files, logs, and incident-related documents for use in incident investigation and legal proceedings and to support claims for possible reimbursement from the responsible party or State and federal agencies.	
	22. Assess contamination and determine which areas are safe to re-enter. Determine and implement remediation measures for other areas.	
	23. As evacuated areas are determined to be safe to re-enter, notify evacuees and special facilities they may return, providing traffic control as needed.	
	24. Curtail shelter and mass care operations as evacuees depart.	
	25. If some areas will require long-term cleanup before they are habitable, develop and implement procedures to mark and control access to such areas. NOTE: Clean-up is the responsibility of the responsible party.	
	26. Assist evacuees who cannot return to their homes in finding temporary housing and obtaining social services.	
	27. Conduct post-incident review of response operations.	

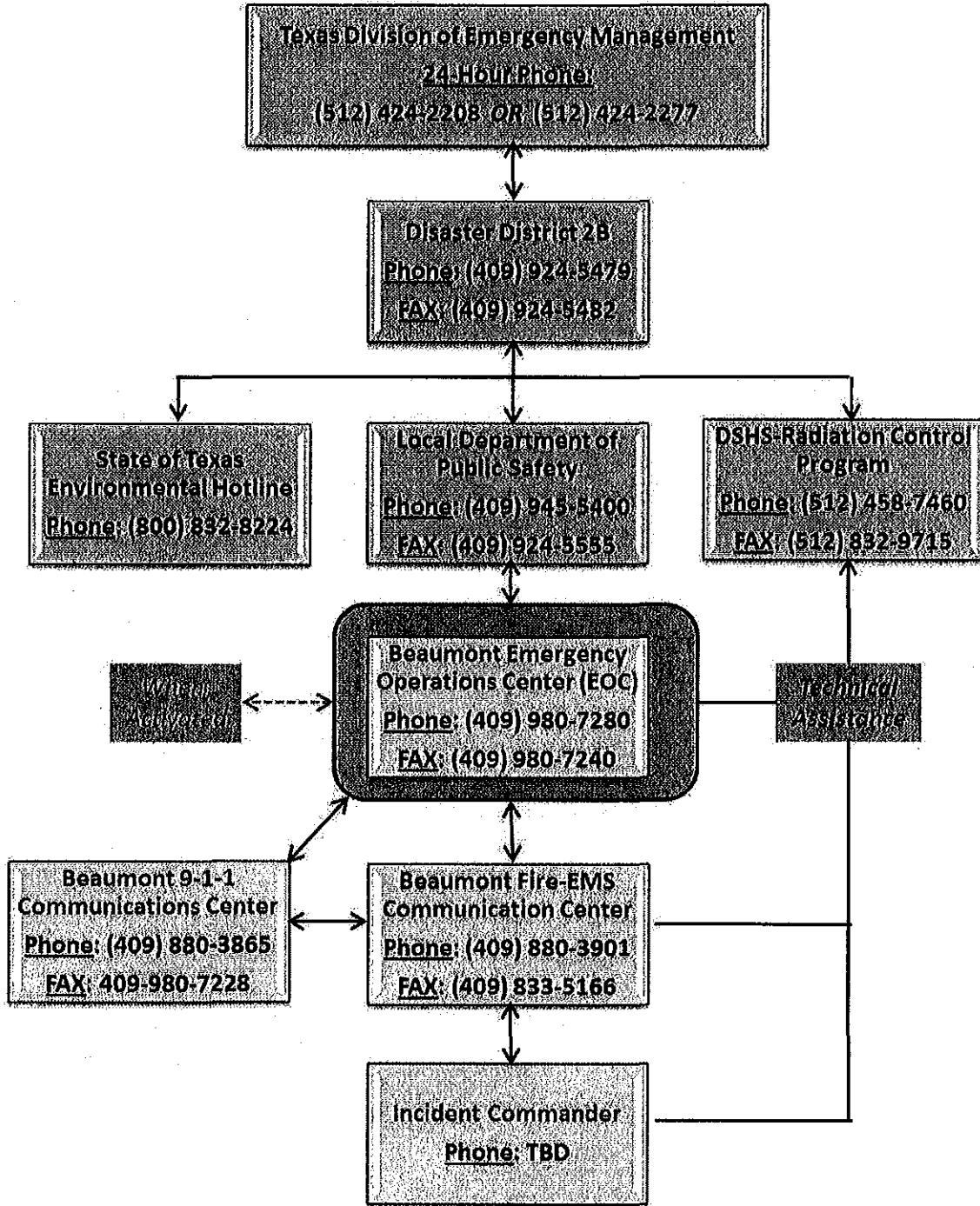
Emergency Incident Classifications

Level III – Incident. An situation that is limited in scope and potential effects; involves a limited area and/or limited population; evacuation or sheltering in place is typically limited to the immediate area of the incident; and warning and public instructions are conducted in the immediate area, not community-wide. This situation can normally be handled by one or two local response agencies or departments acting under an Incident Commander, and may require limited external assistance from other local response agencies or contractors.

Level II – Emergency. An emergency is larger in scope and more severe in terms of actual or potential effects than an incident. It does or could involve a large area, significant population, or critical facilities; require implementation of large-scale evacuation or sheltering in place and implementation of temporary shelter and mass care operations; and require community-wide warning and public instructions. An emergency may require a sizable multi-agency response operating under an Incident Commander, and some external assistance from other local response agencies, contractors, and limited assistance from State and federal agencies.

Level I – Disaster. A disaster involves the occurrence or threat of significant casualties and/or widespread property damage that is beyond the capability of the local government to handle with its organic resources. It involves a large area, a sizable population, and/or critical resources; may require implementation of large-scale evacuation or sheltering-in-place and implementation of temporary shelter and mass care operations and requires a community-wide warning and public instructions. This situation requires significant external assistance from other local response agencies, contractors, and extensive State or federal assistance.

TEXAS RADIOLOGICAL INCIDENT REPORTING SYSTEM



HAZARDOUS MATERIALS INCIDENT GUIDE CARD

Hazmat Incident Guide Card

1. Beaumont Fire/EMS what is the address of the Emergency?
2. What is the Emergency?
3. What is the exact location of the incident? (indoors, outdoors, landmarks)
4. What exactly happened?
 - a. Are there any injuries or people trapped?
 - b. How many?
 - c. Extent?
5. If commercial –
 - a. Type of business?
 - b. Contents and occupancy of building?
 - c. Contents and occupancy of the area surrounding the building?
 - d. Is there an MSDS available?
6. What is the material?
 - a. If unknown, is it a solid, liquid or gas?
 - b. Are there any other materials in or around the area that could be considered hazardous?
7. How much material is present?
8. What type of container is it in?
 - a. Description of container?
 - b. Is it leaking?
9. If Vehicle
 - a. Type? Description?
 - b. Rail car or vehicle numbers vehicle?
 - c. Is there a placard or other identification visible?
 - d. Is there and MSDS available?
 - e. Is the driver available with the bill of lading?
 - *If YES, have the driver meet Responders.*
10. Weather conditions at the scene?
 - a. Wind speed and direction?
 - b. Smoke, fog, rain
11. What is the geography of the area? Urban, rural, densely populated?
12. Are there people or vehicles in the area?
 - a. Have they left the area?
 - b. Mode and direction of travel?

RADIOLOGICAL RESPONSE TRAINING & INSTRUMENTS

1. The City of Beaumont's Radiological Officer (RO) is responsible for coordinating the procedures in this appendix.
2. The purpose of this appendix is to provide guidelines and procedures for maintaining an adequate number of personnel trained to respond to radiological accidents and to maintain radiation detection instruments in operational condition.
3. Personnel training.
 - a. The City of Beaumont will have at least three individuals trained as Radiological Officers.
 - b. DSHS Community Preparedness Section provides training for Radiological Officers and radiological monitors. Courses available include:
 - 1) Fundamentals Course for Radiological Monitors – 8 hours
 - 2) Advanced Course for Radiological Monitors – 32 hours
 - c. Additional training is also available from the Federal Emergency Management Agency (FEMA) in the form of independent study or residential training.
 - d. Personnel trained in radiological protection and decontamination techniques should receive the FEMA-approved refresher training at least every three (3) years.
 - e. The City of Beaumont should have at least one individual trained in radiological response and the use of radiation detection instruments available at all times.
4. Radiation detection instruments
 - a. Inspections, maintenance, and repair of radiation detection instruments will be completed according to the owner's manual for those devices owned by the City of Beaumont.
 - b. Instruments on loan from the State will be inspected, maintained, and repaired according to instructions from the DSHS Community Preparedness Section.
 - c. Instrument sets used to respond to a possible radioactive material accident should be located in vehicles or 24-hour dispatch offices, such as fire stations, law enforcement facilities, or emergency medical service facilities.
 - d. All other radiation detection/measuring instruments, not maintained in 24-hour facilities, should be secured in a dry (low humidity) location.

The City of Beaumont is not on the Planned Route for DOE transuranic waste shipments; therefore, Appendix 5 to Annex D is not applicable.