

ANNEX D

RADIOLOGICAL PROTECTION

**COMANCHE COUNTY & THE CITIES OF
COMANCHE, De LEON, & GUSTINE**

Jurisdiction

APPROVAL & IMPLEMENTATION

Annex D

Radiological Protection

Signature County Judge

Date

Signature EMC

Date

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 establish the organization and to assign responsibilities for an effective and operational radiological protection program (RPP) for the protection of the population in the event of a radiological incident affecting this jurisdiction.

III. EXPLANATION OF TERMS

BRC	Bureau of Radiation Control
DEM	Division of Emergency Management
DOE	(US) Department of Energy
DPS	Department of Public Safety
EOC	Emergency Operations Center
EMC	Emergency Management Coordinator
FEMA	Federal Emergency Management Agency
OSHA	Occupational Safety and Health Administration
IC	Incident Commander
ICS	Incident Command System
RO	Radiological Officer
RPP	Radiation Protection Program
SOP	Standard Operating Procedures
TDH	Texas Department of Health
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. Radiological materials are hazardous materials and are dealt with in some of the 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 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. Support may be provided by federal agencies upon request. The US Department of Energy (DOE) has the initial responsibility for coordinating federal radiological monitoring assistance to state and local governments
- d. The TDH/BRC, as the state radiation control agency, has primary responsibility for the state radiological protection program. TDH/BRC also provides statewide training for ROs and radiological monitors.
- e. The lead federal agency for responding to accidents at nuclear facilities licensed by the State or incidents involving shipments of materials licensed by the State is the Nuclear Regulatory Commission. The US Department of Energy (DOE) and Department of Defense have the lead federal role in incidents at their facilities or accidents involving their shipments.

2. Radiological Hazards.

- a. We are 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.

B. Assumptions

1. We may experience radiological emergency situations which may threaten public health and safety and private or public property and 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 and operational equipment 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 TDH/BRC, 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 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 of the EOC and 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.
2. To conduct an effective RPP, we will:
 - a. Maintain information on radiological monitoring instruments by type, number, location, and owner. We possess radiation detection equipment on loan

from the State. See Appendix 1 for a list of radiological monitoring resources.

- 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 official at the scene will take charge, initiate an incident command operation, and serve as the Incident Commander until relieved by a more senior or more qualified individual.
2. **Local Notification.** The Incident Commander will provide information on the incident to local officials through Comanche County Central Dispatch using the Hazardous Materials Incident Report provided in Tab A to Appendix 3. The Incident Commander shall make an initial assessment of the situation, to include an estimate of the likelihood of a release of radiological materials. If it appears that radiological materials have been released into the environment or such a release appears likely, the EOC will be activated to support the incident response.
3. **Response Actions.** The Incident Commander should identify response resources required and direct the on-scene response to contain or mitigate the incident. 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 the threat and determining requirements for personal protective equipment. Responders who lack hazardous materials

training and appropriate personal protective equipment 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 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. TDH/BRC 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 TDH or other state regulatory agencies and may include controls on the movement and use of foodstuffs, milk, and feed from contaminated areas and on the use of drinking water from contaminated sources.
2. State and Federal Notifications. Comanche County Central Dispatch or the EOC, if activated, shall be responsible for making required emergency notifications to state and federal agencies. Radiological releases should be reported to:
- a. The local Department of Public Safety (DPS) office in Waco which will relay information to DPS elements and the Division of Emergency Management.
 - b. The Bureau of Radiation Control of the Texas Department of Health.
 - c. The State Environmental Hotline.
 - d. The National Response Center.
 - e. If incident involves a deliberate release of radiological materials, the FBI office in Abilene.

See Appendix 3, Texas Radiological Incident Reporting System, and Tab A to Appendix 3, Hazardous Materials Incident Report, for additional information.

6. State & Federal Assistance. The EOC is responsible for coordinating with the TDH/BRC to obtain technical advice and assistance regarding radiological issues. The TDH/BRC staff in Austin has the capability to provide advice by telephone to the EOC or directly to the Incident Commander until TDH/BRC personnel arrive on the scene. The TDH/BRC may formulate requests by the Governor for radiological monitoring and assessment assistance from the federal government or from other states, if required. The Comanche County

Judge or Mayors may request other types of state assistance through the Disaster District Committee Chairperson.

7. Situation Updates. The Incident Commander shall provide situation updates to the EOC; the EOC should prepare and transmit situation reports to the Disaster District. See Appendix N for guidance on situation reporting.
8. Monitoring of Emergency Workers. Exposure records and medical follow-up will be provided for responders who have entered contaminated areas.
9. US Government Nuclear Materials. In the event of a radiological accident involving nuclear weapons, special nuclear material, 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.
10. US Department of Energy (DOE) Shipments. US DOE has jurisdiction on accidents involving DOE transuranic waste shipments. Information on these shipments and guidance on dealing with incidents involving such shipments is provided in Appendix 5.

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) is the lead federal agency for crisis management of malevolent acts involving weapons of mass destruction, including nuclear devices; the Department of Public Safety (DPS) is the lead state agency.

The Federal Emergency Management Agency is the lead federal agency for consequence management of a deliberate radiological release; the Division of Emergency Management 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. Mitigation
 - a. Maintain an effective public warning system.
 - b. Establish/maintain a hazardous cargo route.
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 or store radiological materials. This information may be obtained from the TDH/BRC.
 - 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 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 TDH/BRC to continue area radiation monitoring, if required.
 - d. Work with the TDH/BRC 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
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A. Organization

- 1. The Radiological Officer is in charge of the Radiological Protection Program 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 industry. See paragraph V.B.6, this annex for more information on state and federal assistance.

B. Assignment of Responsibilities

1. The Fire Chiefs and EMC will designate one or more Radiological Officers to coordinate all radiological protection program activities.
2. The Incident Commander 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 Services will:
 - a. Provide personnel and equipment to contain or control radiological incidents.
 - b. Carry out initial radiological monitoring needed to assess the situation and determine protective actions. State or federal agencies may provide follow-on radiological monitoring assistance.
 - c. Carry out 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 TDH/BRC, maintain a copy of that list, and provide copies to emergency response elements for use in operational planning.
 - b. Ensure sufficient 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.
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 in warning the public, if necessary.
 - d. 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. EMS will:
- a. Provide medical care and transportation for casualties.
 - b. Alert hospitals of the potential for contaminated victims.
7. Hospitals will:
- a. Provide medical care for casualties as needed.
 - b. Be prepared to decontaminate contaminated patients.
8. Other 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 or EOC when activated.

VII. DIRECTION & CONTROL

A. Guidance. The Fire Chiefs and EMC will establish local policies relating to radiological protection and may provide general guidance for emergency operations.

- B. Program Management.** The Radiological Officer will carry out day-to-day management of the radiological protection program.
- C. Operational Direction.** During radiological incidents, the Incident Commander will manage radiological response operations at the incident site. The Incident Commander 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 sustain emergency operations.
- D. Communications.** Telephone, radio, teletype, e-mail, and 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 4 - Normal Conditions.

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

B. Level 3 - 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 or notification that a significant radioactive shipment will be transiting our area. 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 2 - 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 or a radioactive source is missing in our jurisdiction. 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, or an incident at a facility licensed to use radiological 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 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 other local jurisdictions, other 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 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 Incident Command Post and the EOC shall maintain accurate logs recording key response activities; activities to be logged are outlined in Section IX of the basic plan.
3. **Response & Recovery Expenses.** As 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 critique shall be conducted in the aftermath of any incident that resulted in an actual release of radiological materials.

C. Maintenance of Radiological Equipment.

1. State-owned instrument sets are normally exchanged periodically by the TDH/BRC so they can be serviced and calibrated. The RO and EMC will coordinate instrument exchanges and any out-of-cycle maintenance requirements for state-owned instruments with TDH/BRC.

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 Chiefs and 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

US Department of Transportation and Transport Canada, *Emergency Response Guidebook*.

FEMA, *Guide for All-Hazard Emergency Operations Planning*, SLG-10.

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 3 Texas Radiological Incident Reporting System

Tab AHazardous Materials Incident Report
Appendix 4 Radiological Response Training & Instruments
Appendix 5.....Vacant

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, this appendix. <ul style="list-style-type: none"> • Level 1 – Incident • Level II – Emergency • Level III – Disaster 	
	3. Record situation on a Hazardous Materials Incident Report (see Appendix 3, Tab A) and provide to Central Dispatch.	
	4. Central Dispatch should relay situation information to emergency responders, who should dispatch forces in accordance with their SOPs.	
	5. Determine extent of danger to responders and establish requirements for personal protective equipment 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 initial 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 5. 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 lack it.	
	12. If evacuation will be conducted, provide traffic control and be prepared to provide transportation to those who lack it.	
	13. Warn other communities that may be threatened by the radiological release.	
	14. If possibility exists of casualties that are contaminated with radiological material, ensure EMS units and hospitals are so advised.	
	15. If evacuation is recommended, staff and open temporary shelters for	

	evacuees. See Annex C, Shelter and Mass Care.	
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✓	Action Item	Assigned
	<p>16. Notifications: See Tab A to Appendix 3 for notification procedures and telephone numbers. The Texas Department of Health/Bureau of Radiation Control must be contacted for radiological accidents. They can provide assistance as needed. See paragraph V.B.6, 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 County or City is responsible for the release, it must make required notifications to state and federal agencies. • If the responsible part cannot be identified or located, the County or City should make required notifications, making it clear that the responsible party is presently unknown. 	
	17. If water or wastewater systems are threatened by radioactive contamination, advise system operators so they may implement preventative measures.	
	18. If on-scene technical assistance is required, request assistance from industry or appropriate state or federal agencies.	
	<p>19. If additional response resources are required, request them.</p> <ul style="list-style-type: none"> • Invoke mutual aid agreements. • Summon hazmat response contractor, if one is under contract. • Request assistance from the State through the Disaster District. 	
	20. Provide updated information on the incident to the public through media releases.	
	21. Continuously 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 reenter, advise 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. 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.	
	27. Assist evacuees who cannot return to their homes in finding temporary housing and obtaining social services.	
	28. Conduct post-incident review of response operations.	

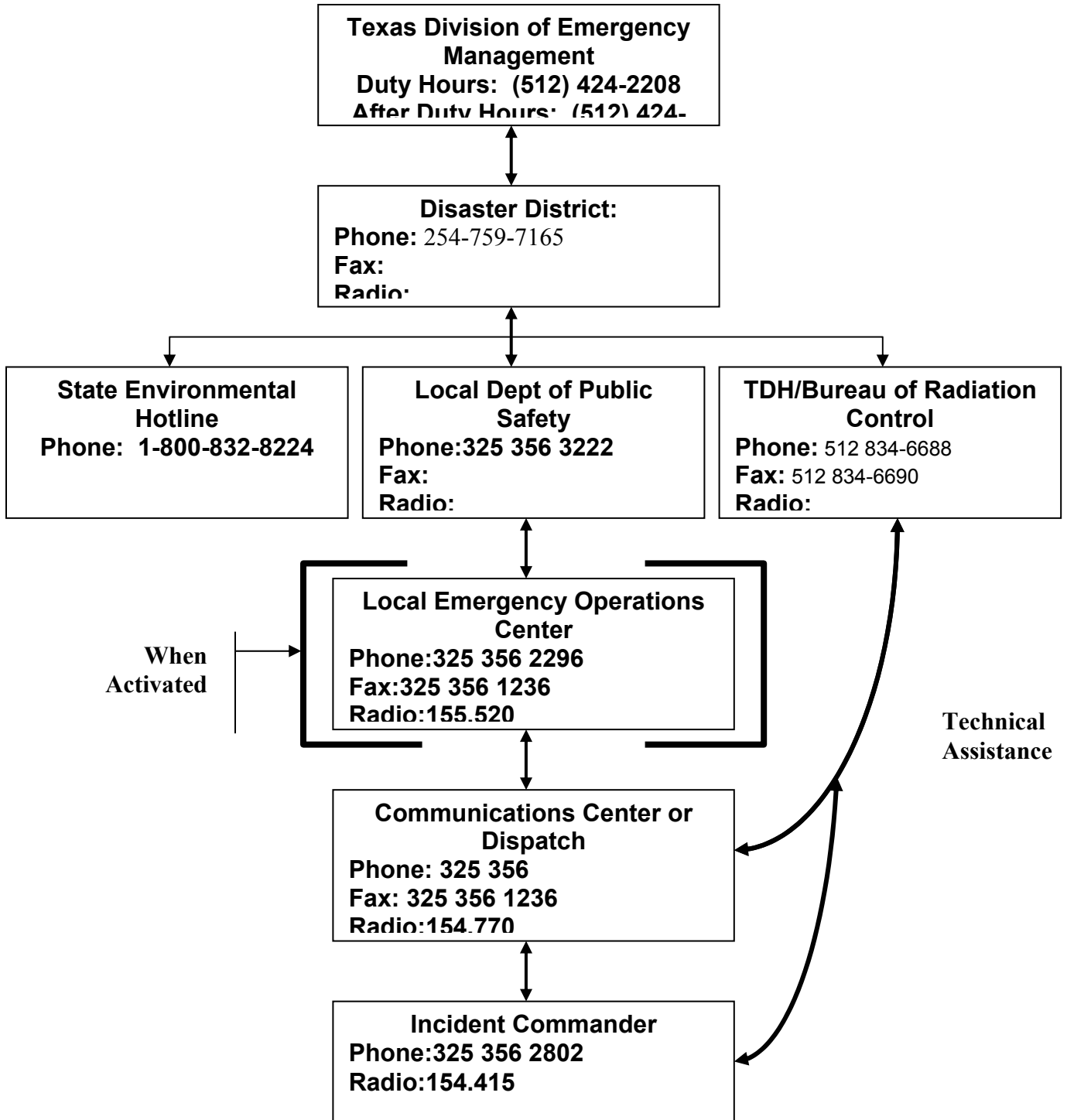
Incident Classification.

Level 1 – Incident. An incident is a situation that is limited in scope and potential effects; involves a limited area and/or limited population; evacuation or in-place sheltering 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 a situation that 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 in-place sheltering and implementation of temporary shelter and mass care operations; and require community-wide warning and public instructions. You 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 III – 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 in-place sheltering 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 REPORT

INITIAL CONTACT INFORMATION

Check one: **This is an ACTUAL EMERGENCY** **This is a DRILL/EXERCISE**

1. Date/Time of Notification: _____ Report received by: _____
2. Reported by (name & phone number or radio callsign): _____
3. Company/agency and position (if applicable): _____
4. Incident address/descriptive location: _____

5. Agencies at the scene: _____

6. Known damage/casualties (do not provide names over unsecured communications): _____

CHEMICAL INFORMATION

7. Nature of emergency: (check all that apply)
 Leak Explosion Spill Fire Derailment Other
 Description: _____

8. Name of material(s) released/placard number(s): _____

9. Release of materials:
 has ended is continuing Estimated release rate & duration: _____
10. Estimated amount of material which has been released: _____
11. Estimated amount of material which may be released: _____
12. Media into which the release occurred: air ground water
13. Plume characteristics:
 - a. Direction (Compass direction of plume): _____
 - b. Height of plume: _____
 - c. Color: _____
 - d. Odor: _____
14. Characteristics of material (color, smell, liquid, gaseous, solid, etc) _____

15. Present status of material (solid, liquid, gas): _____
16. Apparently responsible party or parties: _____

ENVIRONMENTAL CONDITIONS

17. Current weather conditions at incident site:
 Wind From: _____ Wind Speed (mph): _____ Temperature (F): _____
 Humidity(%): _____ Precipitation: _____ Visibility: _____

18. Forecast: _____

19. Terrain conditions: _____

HAZARD INFORMATION

(from ERG Guidebook, MSDS, CHEMTREC, or facility)

- 20. Potential hazards: _____
- 21. Potential health effects: _____
- 22. Safety recommendations: _____
- Recommended evacuation distance: _____

IMPACT DATA

- 23. Estimated areas/ populations at risk: _____
- 24. Special facilities at risk: _____
- 25. Other facilities with Hazmat in area of incident: _____

PROTECTIVE ACTION DECISIONS

- 26. Tools used for formulating protective actions
 - _____ a. Recommendations by facility operator/responsible party
 - _____ b. *Emergency Response Guidebook*
 - _____ c. Material Safety Data Sheet
 - _____ d. Recommendations by CHEMTREC
 - _____ e. Results of incident modeling (CAMEO or similar software)
 - _____ f. Other: _____

- 27. Protective action recommendations:
 - _____ Evacuation _____ Shelter-In-Place _____ Combination _____ No Action
 - _____ Other _____

Time	Actions Implemented	
_____	_____	_____
_____	_____	_____
_____	_____	_____

- 28. Evacuation Routes Recommended: _____

EXTERNAL NOTIFICATIONS

- 29. Notification made to:

_____ National Response Center (Federal Spill Reporting)	_____ 1-800-424-8802
_____ Environmental Hotline (State Spill Reporting)	_____ 1-800-832-8224
_____ CHEMTREC (Hazardous Materials Information)	_____ 1-800-424-9300
_____ TNRCC (Most Hazmat spills, except as indicated below)	_____ 1-800-832-8224
_____ RRC (Oil/gas spills - production facilities, intrastate pipelines)	_____ 325-677-3545
_____ TDH/BRC (Radiological incidents) (24 Hours)	_____ 512-458-7460
_____ GLO (Petroleum spills in coastal waters or tributaries)	_____ 800 792-3485
_____ Disaster District [Location: Waco]	_____ 254-759-7165
_____ Division of Emergency Management Operations Center Austin (24 Hrs)	_____ (512) 424-2277

30. Other Information: _____

RADIOLOGICAL RESPONSE TRAINING & INSTRUMENTS

1. The County and Cities 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 deal with radiological accidents and to maintain radiation detection instruments in operational condition.

- a. Personnel training.

- 1) County and Cities will have two individuals trained as radiological officers.
- 2) TDH/BRC provides training for Radiological Officers and radiological monitors. Courses available include:
 - a) Fundamentals Course for Radiological Monitors – 8 hours
 - b) Advanced Course for Radiological Monitors – 32 hours

Additional training is also available from the Federal Emergency Management Agency (FEMA).

- 3) Personnel trained in radiological protection and decontamination techniques should receive the FEMA-approved refresher training at least every three (3) years
- 3) The Fire Departments shall have at least one individual trained in radiological response and on the use of radiation detection instruments on each shift.

- b. Radiation detection instruments

- 1) Inspections, maintenance, and repair of radiation detection instruments will be completed according to the owner's manual for those devices owned by County and Cities.
- 2) Instruments on loan from the State will be inspected, maintained, and repaired according to instructions from the TDH/BRC.
- 3) Instruments 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, or emergency medical service facilities.
- 4) All other radiation detection/measuring instruments, not maintained in 24-hour facilities, should be secured in a dry (low humidity) location.

Vacant
