ANNEX 10 (ESF-10)

HAZARDOUS MATERIALS

PRIMARY: SCDHEC

SUPPORT: As directed within the SCEOP, each supporting agency or organization will respond to coordinate the emergency activities of its department for a declared earthquake disaster.

I. INTRODUCTION

A. Due to ground shaking and the potential for liquefaction, HAZMAT may be released from an earthquake based on an M 7.3 earthquake event in the Charleston area. The loss estimation inventory includes ~18,000 HAZMAT sites within the State, and of these, 3,000 (16%) are located within Berkeley, Charleston, Dorchester, Beaufort, and Colleton counties.

B. If the earthquake situation described within the planning scenario causes or has the potential to cause a radiological release outside the earthquake Operational Areas and/or affects a licensed radiological source, the response to such an incident will be in accordance with Appendix 2, SC Operational Radiological Emergency Response Plan (SCORERP) and SCDHEC Technical Radiological Emergency Response Plan (SCTRERP). These detailed plans contain the response actions for local, state, and federal governments for the four fixed nuclear facilities and the United States Department of Energy Savannah River Site (SRS) facility located in South Carolina.

C. ESF-10 will prepare for disaster response using the Operational Area Concept and worst case loss estimation data in Attachment C to the Basic Plan.

II. MISSION

To provide for a coordinated response by state, local, and federal resources to minimize the adverse effects on the population and the environment resulting from the release of, or exposure to, hazardous material following an earthquake.

III. CONCEPT OF OPERATIONS

A. Response operations will use an Earthquake Checklist that will be executed following a strong earthquake. Activities in the Earthquake Checklist do not replace required activities normally assigned to ESF in the SCEOP and supporting ESF SOP. The Checklist activities are to ensure that critical actions are completed or continuing at the appropriate

time during an earthquake response. See Attachment A to this Annex for Checklist.

B. The initial HAZMAT response will be a local effort with priorities set by local government.

C. ESF-10 will provide technical support for HAZMAT cleanup and disposal immediately following a strong earthquake. ESF-10 will maintain close coordination with SERT and local officials to establish priorities for HAZMAT response support.

D. Due to the potential of HAZMAT release, Technical Assistance Teams (TATs) will be deployed to the Operational Areas to assess the HAZMAT situation and coordinate technical assistance as prioritized. TATs will report to the designated staging area to coordinate with the Incident Commander (IC) on scene. The deployment will be prioritized according to the actual field reports, known Tier II, and regulated petroleum facilities, in relation to HAZUS projections. See the Attachment B to this Annex for more information on TAT.

E. The assessment will include the nature, amount, and locations of real or potential releases of HAZMAT, pathways to human and environmental exposure, probable direction and time of travel of the materials, potential impact on human health, welfare, safety, and the environment. An aerial assessment may also be conducted to assess obvious problems such as fires at industrial complexes and petroleum in rivers.

F. Based on disaster intelligence information ESF-10 will determine resource deficits and request support. The USCG, private contractors, EMAC, the U.S. Army Corp of Engineers, and the Environmental Protection Agency (EPA) may provide assistance in the assessment and clean up efforts.

G. Coordinate with ESF-1 to provide transportation requirements for TATs.

H. The concept of operations for a potential radiological release and/or release from licensed radiological sources is to respond and follow existing procedures as outlined in the SCEOP, SCORERP Appendix 2, and SCDHEC SCTRERP as closely as possible. Close coordination with local, State, and federal governments will be essential, and will be adhered as outlined in the Plans.

I. After the earthquake ESF-10 will assess the status of each affected fixed nuclear facility and immediately report the status to the SERT.

IV. ESF ACTIONS

The emergency operations necessary for the performance of this function include but are not limited to:

A. Preparedness

1. Inventory Tier II and regulated petroleum facilities in Operational Areas.

2. Develop procedures for response to HAZMAT incidents in the Operational Areas based on field reports and known potential areas of concern in relation to HAZUS projections.

3. Coordinate with responding agencies within each Operational Area to include determining the personnel and equipment needed to support a hazardous materials incident in the Operational Areas.

4. Assign TATs to Operational Areas.

5. Identify the number of additional response personnel required and coordinate EMAC requests to meet the shortfalls.

6. Review and update procedures for deploying the TATs based on the Operational Area Concept.

7. Prioritize response to HAZMAT incidents, Tier II, and regulated petroleum facilities in the Operational Areas.

8. Examine the need for "specialized resources" based on type and quantities of HAZMAT and the nature and location of the release.

9. Exercise TATs to validate plans and operational procedures.

10. Coordinate plans to ensure that adequate procedures are in effect to respond to a potential radiological release from a fixed nuclear facility(ies) and/or licensed radiological sources due to a strong earthquake where major support by State and federal governments will be required.

11. Develop procedures to communicate with fixed nuclear facilities to assess the level of damage after an earthquake

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12. Provide ESF-1 transportation requirements for ESF-10.

B. Response

1. Implement ESF-10, Earthquake Checklist, Attachment A to this Annex.

2. Within Operational Areas, determine condition of Tier II and regulated petroleum facilities.

3. Validate resource shortfalls and coordinate federal response, EMAC requests, and additional contractor resources to assist in HAZMAT response.

4. Validate and adjust TAT plans.

5. Maintain communications status with deployed TATs.

6. Verify status of nuclear facilities.

C. Recovery

See Recovery Section, Annex 10, (ESF-10) to the SCEOP.

D. Mitigation

See Mitigation Section, Annex 10, (ESF-10) to the SCEOP.

V. RESPONSIBILITIES

SCDHEC, Division of Waste Assessment and Emergency Response

A. Inventory Tier II and regulated petroleum facilities in Operational Areas. Provide SCEMD GIS layer of Tier II and regulated petroleum facilities per Operational Area for HAZUS.

B. Develop procedures for response to HAZMAT incidents in the Operational Areas based on HAZUS.

C. Coordinate with responding agencies within each Operational Area based on the earthquake scenario. Determine the personnel and equipment needed to support a HAZMAT incident in the Operational Areas.

D. Assign TATs to Operational Areas.

E. Identify the number of additional technical assistance teams required, and coordinate federal response, EMAC requests, and additional contractors to meet the shortfalls.

F. Prioritize response to the most critical Tier II facilities in each Operational Area.

G. Examine the need for "specialized resources" based on type and quantities of HAZMAT and the nature and location of the release.

H. Exercise TATs to validate plans and operational procedures.

I. Coordinate plans to ensure that adequate procedures are in effect to respond to a potential radiological release from a fixed nuclear facility(ies) and/or licensed radiological sources due to a strong earthquake where major support by State and federal governments will be required.

J. Develop procedures to communicate with fixed nuclear facilities to assess the level of damage after an earthquake.

K. Provide ESF-1 transportation requirements for ESF-10.

L. Review and update procedures for deploying the TATs based on the earthquake Operational Area Concept.

M. Review and update as necessary the Earthquake Checklist for ESF-10.

VI. FEDERAL INTERFACE

The National Response Framework (NRF) ESF-10, Hazardous Materials, supports this Annex.

VII. ATTACHMENT

Attachment A ESF-10 Earthquake Checklist

Attachment B Technical Assistance Team (TAT)

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ESF-10 (Hazardous Materials)

	Date/Time Complete	
1.	*_____	Validate condition of Tier II and regulated petroleum facilities. Establish priorities of known releases.
2.	*_____	Mobilize and deploy TAT teams (in coordination with SERT Operations) for deployment and coordinate team departure.
3.	*_____	Contact fixed nuclear facilities to determine if damage has occurred due to earthquake. Activate SCORERP and SCTERP if required.
4.	_____	Request needed support through EMAC per Agency approval.
5.	_____	Review licensed radiological sources response procedures to determine if response to facilities is needed.
6.	_____	Validate resource shortfalls and coordinate additional contractor resources to assist in HAZMAT response. Inform SERT of availability of contractors.
7.	_____	Coordinate, through SERT Operations Group, to secure services to Federal ESF-10 resources as necessary. Serve as State liaison with federal agencies.
8.	_____	Coordinate with ESF-1 and ESF-16 on accessibility of transportation routes in the impacted areas.
9.	_____	Provide ESF-1 transportation requirements into the affected area.
10.	_____	Maintain communications status with deployed TATs.

***NOTE:** All Checklist activities listed are essential, and should be completed. However, Checklist activities denoted with an asterisk are critical, and should be completed first. Other action items can be executed simultaneously to expedite response actions.

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TECHNICAL ASSISTANCE TEAM (TAT)

A. PURPOSE

The TAT will be dispatched to the affected areas of the State to perform the following tasks:

1. Make rapid assessments of hazardous substance incidents.

2. Inspect areas of concern due to the nature of their business or materials known to be present.

3. Perform the responsibilities of the SCDHEC On-Scene Coordinator (DOSC).

4. Ensure that all incidents are stabilized as to minimize impacts to the public health and the environment.

5. Collect and record information onto standard forms and communicate it back to the SCDHEC's Farrow Road Command Center (FRCC), which will provide the information to the ESF-10 representative.

6. Advise the FRCC of resources needed at each particular incident.

7. Request assistance from a monitoring/sampling team if an exclusion (hot) zone entry is to be performed by SCDHEC.

8. Coordinate local efforts and activities with the Region Environmental Quality Control (EQC) office personnel.

9. Interface with and provide technical assistance to local public response efforts and/or affected industries.

B. ORGANIZATION

Each of the 12 EQC regional offices has appointed a two-person team. Each team member is currently a trained SCDHEC DOSC. ESF-10 TATs from unaffected regions will be mobilized to respond as soon as possible to assist any area that might be affected and, depending on the impact of an incident, a maximum of six TATs might be dispatched to an affected area of the State during an operational period.

C. COORDINATING INSTRUCTIONS

1. Transportation: Teams may assemble at Bureau of Land & Waste Management offices on Farrow Road in Columbia, SC, or, may be

directed to respond from their region office. The FRCC will dispatch teams to areas of concern and direct their field response.

2. Lodging: If overnight lodging is required, the teams will coordinate before departure with its Human Resource Officer.

3. Communications: Each team member will carry an individual pager, and each vehicle will have a cellular phone, a satellite phone, and an 800MHz handheld radio.

4. Reporting Requirements: All communications will be to the FRCC for detailed analysis and further response assignments. TATs may also be assigned special duties involving other EQC program areas based on individual knowledge and availability. The FRCC will monitor and update WebEOC and coordinate TAT activities through the ESF-10 liaison at SERT. An ESF-10 representative will provide reports to SERT Operations Group for discussion and process.