

ANNEX 10

ESF-10 - HAZARDOUS MATERIALS

PRIMARY: SC Department of Health and Environmental Control

SUPPORT: SC Department of Agriculture; SC Department of Labor, Licensing and Regulation, Division of Fire and Life Safety and Division of Labor; SC Department of Natural Resources, Division of Marine Resources, Division of Law Enforcement and Division of Wildlife and Freshwater Fisheries; SC Department of Public Safety; SC Department of Transportation, SC Forestry Commission; SC Law Enforcement Division; Clemson University Department of Pesticide Regulation; SC Department of Administration, Division of Technology Operations; SC Department of Corrections; Office of the State Archeologist; SC Ports Authority; SC National Guard; SC Office of Regulatory Staff; Civil Air Patrol

I. INTRODUCTION

- A. Emergency or disaster events could result in hazardous materials being released into the environment.
 - 1. Fixed facilities (e.g., chemical plants, nuclear facilities, tank farms, laboratories, hazardous waste treatment, storage and disposal facilities), including radioactive materials, could be damaged so severely existing spill control apparatus and containment measures may be compromised.
 - 2. Transportation of hazardous materials by roads, rail, pipelines, air, and waterways will inevitably result in releases.
 - 3. Abandoned hazardous waste is an ongoing regulatory concern that disasters may exacerbate.
- B. County and local responders may become overwhelmed by the magnitude of response required to assess, monitor, contain, remove and dispose of hazardous materials.
 - 1. Numerous simultaneous releases in various locations could result from large-scale catastrophic events.
 - 2. Standard communications media (phone lines, transmission towers, power sources, etc.) may be disrupted or destroyed.
 - 3. Damaged transportation infrastructure may delay and hinder response efforts to assess, contain, and remove hazardous material releases.
 - 4. Additional resources from outside the region may be necessary to supplement on-going efforts.
- C. Concern about facilities and infrastructure in affected areas during disaster situations necessitates the monitoring and verification of the status of regulated entities.

- D. It is likely there will be several releases occurring simultaneously, making heavy demands on response resources. Communication and information collection through all means possible are necessary to prioritize and manage the allocation of resources into the affected areas of the State.
- E. The rapid assessment of the affected areas will enable accurate and timely requests from support agencies to deploy the assistance required.

II. PURPOSE

Coordinate 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 materials.

III. CONCEPT OF OPERATIONS

- A. The SC Department of Health and Environmental Control (SCDHEC), Division of Emergency Response, is the Lead Agency for the coordination of ESF-10 administrative, management, planning, preparedness, mitigation, response and recovery activities to include developing, coordinating, and maintaining the ESF-10 Standard Operating Procedures (SOP) which detail both radiological and non-radiological responsibilities.
- B. ESF-10 supporting agencies will assist the SCDHEC, Division of Emergency Response in the planning and execution of the above.
- C. ESF-10 will coordinate with all supporting and other appropriate departments/agencies and Federal organizations to ensure operational readiness in time of emergency.
- D. State program assistance under this function will include the application of available personnel, equipment, and technical expertise necessary to contain, counteract, and supervise cleanup of hazardous materials.
- E. ESF-10 response consists of two components:
 - Non-Radiological or Chemical refers to non-radioactive hazardous substances or materials in a quantity or form that poses a risk to health and safety.
 - Radiological refers to radioactive hazardous substances or materials in a quantity or form that poses a risk to health and safety.

F. ESF-10 will:

- Coordinate, integrate, and manage the overall State effort to detect, identify, contain, clean up, dispose of, or minimize releases of oil or hazardous substances and minimize the threat of potential releases.
- In the case of a radiological incident, provide technical assistance and resources necessary to evaluate and assess the consequences of an incident, and to provide protective action guidelines to State and local authorities.

G. Radiological Emergencies

1. In the event of a radiological emergency, plans and procedures that detail emergency response activities for ESF-10 are addressed in the following publications:
 - South Carolina Operational Radiological Emergency Response Plan (SCORERP)
 - South Carolina Technical Radiological Emergency Response Plan (SCTRERP)
 - South Carolina State Technical Radiological Operating Procedures (SCSTROP)
 - Spent Nuclear Fuel Emergency Action Plan (SNF EAP)
 - Westinghouse Site Emergency Response Procedures
2. When a discharge or release involves radioactive material, the State's response will be consistent with the SCORERP, SCTRERP, and DHEC Regulation 61-63 (Radiological Materials).
3. SCDHEC has standard operating procedures for Waste Isolation Pilot Project (WIPP) shipments.

H. Chemical Emergencies

1. In the event of a chemical emergency, plans and procedures that detail emergency response activities are addressed in the following publications:
 - National Oil and Hazardous Substances Pollution Contingency Plan (National Contingency Plan) (40 CFR 300)
 - Federal Water Pollution Control Act (Clean Water Act) (33 U.S.C. §1251 et seq. (1972))
 - South Carolina Oil and Gas Act (South Carolina Code of Laws, Title 48, Chapter 43)

- Pollution Control Act (South Carolina Code of Laws, Title 48, Chapter 1)
 - South Carolina Hazardous Waste Management Act (South Carolina Code of Laws, Title 44, Chapter 56)
 - State of South Carolina Contingency Plan for Spills and Releases of Oil & Hazardous Substances (SCDHEC).
2. SCDHEC Division of Emergency Response maintains SOPs for response to chemical spills and releases.
- I. In coordination with and in support of the Counties, ESF-10 will assess the situation (both pre- and post-event), and, in coordination with local emergency management officials, develop strategies to respond to the emergency.
- J. Local governments
1. Local governments are responsible for the protection and well-being of their citizens. However, owners and shippers are responsible for subsequent cleanup and containment.
2. Local governments, through the designated response agencies, will:
- Respond to hazardous material incidents of all types and sizes.
 - Make initial assessments of the severity/magnitude of the situation.
 - Take appropriate first responder protection measures to prevent or minimize injuries and property damage.
- K. Terrorism or Weapons of Mass Destruction (WMD) Events
1. The SC Law Enforcement Division (SLED) is the lead State agency for crisis management of incidents regarding suspected or confirmed terrorism or WMD.
2. South Carolina Emergency Management Division (SCEMD) is lead State agency for consequence management.
3. See Appendix 8 (SC Terrorism Incident Plan) of the SC Emergency Operations Plan (SCEOP).
- L. ESF-10 will coordinate with Federal ESF-10 agencies to obtain Federal assistance as required.

IV. ESF ACTIONS**A. Preparedness**

1. Prepare an inventory of existing threats using Superfund Amendments and Re-Authorization Act (SARA) Title III, Tier II information.
2. Plan for response to hazardous materials incidents.
3. Develop plans for communications, warning, and public information.
4. Develop procedures for identification, control, and clean-up of hazardous materials.
5. Provide, obtain, or recommend training for response personnel using courses made available by FEMA, Department of Homeland Security (DHS), Department of Energy (DOE), Nuclear Regulatory Commission (NRC), SCEMD, SCDHEC, the South Carolina Fire Academy (SCFA), U.S. Environmental Protection Agency (USEPA) and manufacturers and transporters of hazardous materials, as well as training based on Occupational Safety & Health Administration (OSHA) requirements for each duty position.
6. Maintain a listing of private contractors capable of performing emergency and/or remedial actions associated with a hazardous materials incident.
7. Maintain an inventory of State assets capable of responding to a hazardous materials incident.
8. Develop plans and/or mutual aid agreements regarding hazardous materials incidents with local agencies, other state agencies, contiguous states, federal agencies, and private organizations as required.
9. Collect and utilize licensing, permitting, monitoring, and/or transportation information from the appropriate local, State, or Federal agencies and/or private organizations to facilitate emergency response.
10. Participate at least annually in State exercises and/or conduct an exercise to validate this Annex and supporting SOPs.

B. Response

1. Coordinate all hazardous substance response-specific efforts with the Incident Command, and provide information to the SEOC for coordination of all other State efforts.
2. Coordinate 24-hour response capability to an incident scene as necessary.

3. Assess the situation to include:
 - The nature, amount and location of real or potential releases of hazardous materials
 - Exposure pathways to human and environment
 - Probable direction and time of travel of the materials
 - Potential impact on human health, welfare, safety, and the environment
 - Types, availability, and location of response resources
 - Technical support, and cleanup services
 - Priorities for protecting human health, welfare and the environment
4. After reviewing reports, gathering and analyzing information and consulting with appropriate agencies, determine and provide, as available, the necessary level of assistance.
5. Provide Protective Action Recommendations (PAR) as the incident requires.
6. Coordinate monitoring efforts to determine the extent of the contaminated area(s) and consult with appropriate support agencies to provide access and egress control to contaminated areas.
7. Decontamination
 - a. Consult with appropriate local, State, or Federal agencies and/or private organizations with regard to the need for decontamination.
 - b. Coordinate technical assistance regarding decontamination of injured or deceased personnel.
 - c. Coordinate decontamination activities with appropriate local, State, and Federal agencies.
 - d. Provide technical assistance and guidance to decontamination activities for the protection of human health and the environment.
8. Coordinate with appropriate local, State, and Federal agencies to ensure the proper disposal of wastes associated with hazardous materials incidents; and assist in monitoring or tracking such shipments to appropriate disposal facilities.
9. Coordinate with appropriate ESF's (when activated) for use of assets, technical advice and support as needed.

10. Coordinate with SEOC Logistics for the location and use of staging areas for the deployment of personnel, assets, and materials into the affected zones.
11. Provide ESF-10 representation on the Recovery Task Force.

C. Recovery

1. Transition to recovery operations and provide personnel and resources as required. SCDHEC will track continued or needed remediation as necessary.
2. Request and maintain documented records of all expenditures of funds and physical resources of the various governmental department/agencies involved.
3. Integrate field operations into the Joint Field Office (JFO) as required.
4. Support long-term recovery priorities as identified by the Recovery Task Force.

D. Mitigation

1. Support and plan for mitigation measures including monitoring and updating mitigation actions in the State Hazard Mitigation Plan.
2. Review, evaluate and comment on proposed State Hazard Mitigation Plan amendments, upon initiation and within review period.
3. Support requests and directives from the Governor and/or FEMA concerning mitigation and/or re-development activities.
4. Document matters that may be needed for inclusion in agency or State/Federal briefings, situation reports and action plans.

V. RESPONSIBILITIES

A. General

1. ESF-10 primary and support agencies will maintain contact with and prepare to conduct operations in support of ESF-10 during periods of activation
2. ESF-10 personnel will be familiar with the National Response Framework and the corresponding annex with Federal counterpart concepts, actions and responsibilities. This familiarization will include but not be limited to the structure, organization, functions and responsibilities of the Incident Management Assistance Teams (IMAT) and the JFO.

B. SC Department of Health and Environmental Control

1. Notify ESF-10 supporting agencies upon activation.
2. Review files submitted to SCDHEC regarding presence of chemicals covered under the Emergency Planning and Community Right to Know Act (EPCRA) Tier II program (computer accessible).
3. Utilize contact and inventory information submitted in compliance with EPCRA, as well as GIS data layers compiled by SCDHEC, to evaluate potential releases and monitor areas of concern.
4. Provide and/or coordinate technical assistance on hazards known to be present in the disaster area. These activities include decontamination and long-term remediation.
5. Provide technical assistance for hazardous material recognition and identification.
6. Coordinate laboratory assistance to include analyzing and identifying contaminants, pesticides, and other toxic materials in air, soils, vegetation, and water.
7. Coordinate responsible party responses or the use of Federal/State contractors to control and contain a hazardous material release to protect public health and/or the environment.
8. Provide expertise on environmental effects of oil discharges, or releases of hazardous substances, pollutants, or contaminants and environmental pollution control techniques.
9. Coordinate decontamination activities with appropriate local, State, and Federal agencies.
10. Provide technical assistance and guidance to decontamination activities for the protection of human health and the environment.
11. Develop and coordinate all SCDHEC/ESF-10 emergency response plans and procedures.

C. Department of Agriculture

1. Provide collection, sampling, and laboratory analysis assistance. SCDOA maintains equipment/instrumentation and supplies necessary to perform chemical analyses on a variety of samples that may be associated with hazardous materials releases.

2. Provide technical assistance in securing representative samples of materials suspected of chemical contamination.
 3. Provide laboratory assistance to include analyzing and identifying contaminants such as pesticides and certain other toxic materials in soils, vegetation, and to some extent, in water.
 - a. Chemical assistance provided includes identification of chemical, macroscopic, and microscopic analyses of food and feed products to determine quality and/or safety (excludes microbiologic analyses).
 - b. Field laboratory equipment includes grain probes, sample containers, for sampling collection and some chemical analysis.
- D. SC Department of Labor, Licensing and Regulation
1. Division of Fire and Life Safety
 - a. Act as a liaison, when needed, between local fire departments and the SCDHEC On-Scene Coordinator during hazardous materials incidents.
 - b. Provide assistance under the Firefighter Mobilization Act to support ESF-10 operations.
 - c. Assist in coordination in collecting and securing containers of Liquefied Petroleum Gas (LPG).
 2. Division of Labor.

Provide consultation on health and safety issues.
- E. SC Department of Natural Resources
1. Provide technical advice and assistance on wildlife and environmentally sensitive areas of the State.
 2. Provide all-terrain vehicles, boats and four-wheel drive vehicles to aid in the investigation of spills and releases.
 3. Provide aircraft for air surveillance and transportation of essential personnel and environmental samples.
- F. SC Department of Public Safety
1. Provide transportation of samples and personnel.
 2. Provide traffic and/or crowd control.

3. Provide technical support on the transportation of hazardous or radioactive materials over the road and technical support and investigations on transporters of hazardous and radioactive materials.

G. SC Department of Transportation

1. Identify, train and assign personnel to maintain contact with and prepare to conduct operations in support of ESF-10 during periods of activation.
2. Provide communication, heavy equipment, personnel and transportation support.

H. SC Forestry Commission

1. Provide heavy equipment to access and control release sites.
2. Provide available aircraft and statewide communication assets during activations.

I. SC Law Enforcement Division

1. Provide aviation support for surveillance and transportation of essential personnel.
2. Provide laboratory services for environmental and other samples.
3. Provide law enforcement for criminal investigations of arson, releases, etc.
4. Provide WMD/Terrorism response assistance.

J. Clemson University Department of Pesticide Regulation

1. Provide laboratory services and analyses.
2. Provide an agrichemical database to include locations, type, and quantity.
3. Provide technical assistance with pesticides

K. SC Department of Administration, Division of Technology Operations

1. Assist ESF-10 with communications related issues and resolutions in support of ESF-10 operations during periods of activation.
2. Provide radios and communications equipment.

- L. SC Department of Corrections
1. Provide correctional facility work crews for non-hazardous cleanup operations.
 2. Provide bus transportation for field crews.
- M. Office of the State Archeologist
- Provide technical support in locating and assessing hazardous material damage to inland and offshore archeological sites.
- N. SC Ports Authority
1. Coordinate resources and provide storage space as needed by ESF 10.
 2. Support large release responses in the port area.
- O. South Carolina National Guard
1. Provide equipment and trained personnel in support of response to disaster events.
 2. Provide the 43rd Civil Support Team to respond in support of ESF 10.
- P. Civil Air Patrol
- Provide available fixed wing aircraft for surveillance, videography, reconnaissance, and urgent airlift of personnel and supplies.

VI. FEDERAL ASSISTANCE

- A. This Annex is supported by National Response Framework ESF-10 (Oil and Hazardous Materials Response).
- B. Federal ESF-10 response activities include situation assessment, identification of support resources, and coordination of Federal support of on-scene response operations.
- C. Assistance related to hazardous materials incidents is available from, but not limited to, the following federal agencies under the National Oil and Hazardous Pollution Contingency Plan (EPA):
- Environmental Protection Agency (EPA)
 - Department of Defense (DoD)
 - DHS/United States Coast Guard (USCG)

- D. Assistance related to Radiological Incidents is available from but not limited to, the following federal agencies under the Federal Radiological Emergency Response Plan:
- Nuclear Regulatory Commission (NRC)
 - Department of Energy (DOE)
 - Environmental Protection Agency (EPA)
- E. Response actions carried out by Federal ESF-10 are conducted in accordance with the National Oil and Hazardous Substances Response System (NRS) described in the NCP.
- F. Key components of the NRS include the National Response Team (NRT), Regional Response Teams (RRT), and Federal On-Scene Coordinators.
- G. During a response RRTs will deploy their respective agency response resources and provide assistance and advice to Federal OSC(s). Either the EPA or USCG Co-Chair of the RRT serves as the Regional Lead for ESF-10 within its region.
- H. The RRT Regional Chair will coordinate with the FCO, other responding federal agencies, and State officials. The Regional Chair will designate a representative to the advance element of the Emergency Response Team (ERT-A) and determine staffing requirements of the full ERT at the JFO.