

## ANNEX 10

### ESF-10 – ENVIRONMENTAL AND HAZARDOUS MATERIALS OPERATIONS

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COORDINATING: SC Department of Health and Environmental Control

PRIMARY: 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

SUPPORT: SC Department of Administration, Office of Technology Operations; SC Department of Corrections; Office of the State Archeologist; SC Ports Authority; SC Department of Agriculture; SC National Guard; Civil Air Patrol

#### I. INTRODUCTION

Environmental and Hazardous Materials Operations services consists of resources temporarily aligned from established programs having coordination or direct service capability for the following:

- Air Quality
- Land and Waste Management
- Water and Wastewater
- Environmental Health
- Ocean and Coastal Resource Management (OCRM)

#### II. PURPOSE

Coordinate State, local, and Federal resources to minimize the adverse effects on the population and the environment resulting from disaster events.

#### III. CONCEPT OF OPERATIONS

A. The SC Department of Health and Environmental Control (SCDHEC) is responsible for the coordination of ESF-10 administrative, management, planning, preparedness, mitigation, response, and recovery activities which include

developing, coordinating, and maintaining the ESF-10 Standard Operating Procedures (SOP) detailing responses to events having environmental impacts.

- B. ESF-10 primary and supporting agencies will assist SCDHEC in the planning and execution of the above.
- C. ESF-10 will coordinate with all primary, supporting, and other appropriate departments/agencies and Federal organizations to ensure operational readiness in time of emergency.
- D. ESF-10 will coordinate with Federal ESF-10 to obtain assistance as necessary.
- E. State program assistance under this function will include the use of available personnel and equipment along with the application of technical expertise necessary to mitigate the effects of an event.
- F. Jurisdictional responsibilities:
  - 1. Local governments are responsible for the protection and well-being of their residents. Local government first responders will respond to incidents, make initial assessments, and take appropriate first responder measures to prevent or minimize injuries and property damage.
  - 2. Property owners are responsible for damage repair and debris removal from their property.
  - 3. Owners, shippers, and transporters are responsible for mitigation of releases.
- 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)
    - Foreign Spent Nuclear Fuel Transportation Standard Operating Procedures, (SOP-T.101)

- Westinghouse Site Emergency Response Procedures
- Waste Isolation Pilot Project (WIPP) shipments SOP
- DHEC Regulation 61-63 (Radiological Materials)

2. SCDHEC maintains SOPs for response to radiological emergencies.

#### 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

2. SCDHEC maintains SOPs for response to chemical spills and releases.

#### I. 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).

- J. Dams and Reservoirs
  - 1. The Federal Energy Regulatory Commission is responsible for emergency preparedness and emergency response at dams within its regulatory purview.
  - 2. The US Army Corps of Engineers is responsible for emergency preparedness and emergency response at dams within its regulatory purview.
  - 3. SCDHEC is responsible for inventory, inspection, review, and emergency preparedness for State regulated dams and assesses unregulated dams on an as-needed basis.
- K. SCDHEC provides regulatory assistance and permitting as required for land disposal of hazardous, radioactive waste, and solid waste; construction, demolition, and event debris; and coordination for mass interment of animal remains.
- L. Potable water sources and supplies
  - 1. SCDHEC provides regulatory assistance and modeling regarding pollution of surface and ground water sources resulting from a disaster.
  - 2. SCDHEC provides regulatory assistance to help restore potable water pressure and volume on a temporary or permanent basis.
- M. Perform post-event coastal damage assessments of habitable structures, pools, and erosion control structures located within the State's beachfront jurisdiction. Issue emergency orders and authorizations for repair or reconstruction of damaged structures within this jurisdiction.

#### **IV. ESF ACTIONS**

- A. Preparedness
  - 1. Prepare inventories of existing threats, including but not limited to: Superfund Amendments and Re-Authorization Act (SARA) Title III, Tier II information; significant and high hazard dams; and facilities required to maintain risk management plans.
  - 2. Develop plans for response to regulated environmental and/or hazardous materials.
  - 3. Develop plans for communications, warning, and public information.
  - 4. Develop procedures for identification, control, and clean-up of hazardous materials; identification and disposal of debris.

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 environmental or hazardous materials.
7. Coordinate with primary and support agencies for State assets capable of responding to environmental or hazardous materials incidents.
8. Develop plans and/or mutual aid agreements regarding environmental or 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 environmental and/or hazardous materials response efforts with the on-scene Incident Command, and provide information to the SEOC for coordination of 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 humans and the 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 (PARs).
  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 environmental and/or hazardous materials incidents, and assist in monitoring or tracking such shipments to appropriate disposal facilities.
  9. Coordinate with appropriate ESFs (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 expenditures of funds and physical resources of the various governmental department/agencies involved as specified by SCEMD.
3. Provide ESF-10 representation to Joint Field Office (JFO) as requested.
4. Support long-term recovery priorities as identified by the Recovery Task Force.

D. Mitigation

1. Review, evaluate, and comment on proposed State Hazard Mitigation Plan amendments upon initiation and within review period.

**V. RESPONSIBILITIES**

A. General

1. ESF-10 primary and support agencies will maintain contact with ESF-10 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.
3. Provide ESF-10 representation to Joint Field Office (JFO) as requested.

B. SC Department of Health and Environmental Control

1. As the coordinating agency, notify ESF-10 primary and supporting agencies upon activation.
2. Review agency files regarding inventories and vulnerabilities of regulated entities and critical infrastructure. Provide communications to entities in accordance with established protocols.
3. Provide or coordinate technical assistance regarding known hazards.
4. Review and update GIS resources.
5. Provide technical assistance and support regarding flooding and inundation.
6. Provide or coordinate technical assistance regarding hazardous material recognition and identification.

7. Provide regulatory assistance and coordination regarding oil spills, releases of hazardous pollutants, and releases of untreated or inadequately treated wastewater; coordinate responsible party responses, and provide lists of response contractors.
8. Provide regulatory assistance regarding disposal of hazardous materials to include chemical and radiological wastes.
9. Provide resources to monitor environmental contamination using fixed and mobile assets, to include field teams.
10. Provide DHEC environmental laboratory services and/or coordinate laboratory assistance from other laboratories.
11. Provide or coordinate technical assistance regarding air modeling, monitoring, and sampling, as necessary.
12. Provide regulatory assistance and approval of state and local sites for the management of disaster debris.
13. Coordinate with ESF-17 (Animal and Agriculture Emergency Response) for disposal of debris containing or consisting of animal carcasses.
14. Coordinate with local municipalities for water and sewer service restoration, debris management, and engineering requirements as requested.
15. Provide regulatory assistance when existing water supply has been disrupted due to power failure or other circumstances.
16. Provide regulatory assistance, information, guidance, and instructions concerning standards for emergency wastewater treatment as requested.
17. Assess regulated dams per established protocol and coordinate with local and state officials as needed. Provide regulatory assistance as needed.
18. Coordinate with fixed nuclear facilities (FNF) regarding review and assessment of FNF plant conditions and parameters. Develop dose projection and protective action recommendations. Provide field monitoring.
19. Provide technical assistance regarding vector control.
20. Provide technical assistance regarding food service for shelters, public institutions, and Volunteer Organizations Active in Disasters (VOAD).



21. Provide technical assistance to coastal communities. Conduct post-event damage assessment, and provide permits or waivers for repair and reconstruction.
22. Issue shellfish advisories in accordance with established protocols.

C. Department of Agriculture

1. Provide assistance with the collection, transport, and laboratory analysis of a defined set of samples which may be associated with agricultural products impacted by an event. Collections and analyses will be conducted in accordance with agency standard operating procedures.
  - a. Field sampling equipment includes:
    - (1) Probes and transport bags for the collection and transport of grains, seeds, finished food, and feed products.
    - (2) Approved containers and carrying cases for the collection and transport of petroleum products.
2. Provide technical assistance in securing representative samples of materials suspected of chemical contamination.
3. Provide laboratory assistance to include:
  - a. Identification of chemical contaminants (such as pesticides and mycotoxins) in samples of soils, fruit and vegetables, finished food, and/or feed products.
  - b. Identification or classification of extraneous matter in finished food and feed products to determine a product's quality and/or safety for human or animal consumption (excludes microbiologic analyses).

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 an event.
  - b. Provide assistance under the Firefighter Mobilization Act to support ESF-10 operations.
  - c. Assist in the coordination of collecting and securing containers of Liquefied Petroleum Gas (LPG).

2. Division of Labor

Provide consultation on worker 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, equipment, and personnel.
2. Provide traffic and/or crowd control.
3. Provide technical support on the transportation of hazardous or radioactive materials (over the road transportation) 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 and equipment.
2. Provide laboratory services as needed.
3. Provide law enforcement for criminal investigations of arson, releases, etc.

4. Provide WMD/Terrorism/SWAT response assistance.
5. Utilize Fusion Center for information gathering.

J. Clemson University

1. Department of Pesticide Regulation (DPR)
  - a. Provide laboratory services and analyses for pesticide products in soil, water, plant materials, and pesticide product formulations. Samples must be collected and transported in accordance with DPR standard sampling procedures.
  - b. Provide pesticide sampling technical assistance and information.
  - c. Provide agrichemical data for pesticide dealerships to include locations and contact information. General information on type and quantity of agrichemicals can be obtained by DPR from dealership records and personnel.
  - d. Provide health and safety information for pesticide products.
  - e. Assist law enforcement and first responders in pesticide product origin/source trace back information from pesticide producers and dealership records.
  - f. Investigate pesticide misuse and pesticide misuse related to criminal cases.

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.
3. Supply sand bags to necessary sites.

- M. Office of the State Archeologist
1. Provide technical support in locating and assessing incident-related damage to inland and offshore archeological sites.
  2. In conjunction with SCDHEC, provide technical assistance and approval of sites for the management of disaster debris. Approve location and operation of disaster debris management for managing vegetative debris and building debris resulting from a disaster.
- 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 43<sup>rd</sup> 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 equipment.

## **VI. FEDERAL ASSISTANCE**

- A. This Annex is supported by the 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 Radiological Incidents is available from, but not limited to, the following federal agencies under the Nuclear Radiological Incident Annex:
- Nuclear Regulatory Commission (NRC)
  - Department of Energy (DOE)
- D. 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)
  - Department of Homeland Security (DHS)/United States Coast Guard (USCG)
- 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 National Contingency Plan (NCP).
- F. Key components of the NRS include the National Response Team (NRT), Regional Response Teams (RRT), and Federal On-Scene Coordinators (OSC).
- 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 Federal Coordinating Officer (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.