

CHAPTER 8 - EMERGENCY FACILITIES AND EQUIPMENT

I. General

In order to effectively coordinate State, local, federal and licensee resources during an emergency at a nuclear power plant, it is preferable that emergency response facilities be established in the vicinity of the power plant. These should be close enough to each other and to the power plant to allow coordination of the response but should be outside the 10-mile Emergency Planning Zone. This chapter describes the emergency response facilities utilized for each of the power plants, identifies the supplies and equipment designated for emergency response, and, identifies the key personnel and organizations that are anticipated to respond to emergencies at each facility.

Impact assessments of offsite radiological emergencies will be performed by the Department of Health, Bureau of Radiation Control, in accordance with the Bureau of Radiation Control's Standard Operating Procedures (refer to the Authorities and Reference Section of this Annex).

II. Florida Emergency Response Facilities

The Division of Emergency Management is responsible for providing and staffing the State Emergency Operations Center and providing specialized equipment to augment county equipment.

A. State Emergency Operations Center

The State Emergency Operation Center is the center for the coordination of State response for any major emergency or disaster. For a more detailed discussion of the State Emergency Operation Center, please refer to **Section IV.D.6** of the State Comprehensive Emergency Management Plan.

Division of Emergency Management staff has been assigned to one of the four Sections (Operations, Information and Planning, Administration, and Logistics) in the Florida State Emergency Response Team Organization (see **Section IV.A.2** of the State Comprehensive Emergency Management Plan). It is the responsibility of the Section and Branch chiefs to ensure that each response area is adequately staffed in accordance with established operating procedures.

In response to a radiological emergency, the State Emergency Operation Center serves as the coordination center for a State response. The State Emergency Operation Center is partially activated (Level II) to support county emergency operations upon declaration of an Alert emergency classification. Upon declaration of a Site Area Emergency or General Emergency the State Emergency Operation Center is fully activated (Level 1) to coordinate all operations undertaken by the State; however, full activation may take place at any time during a rapidly escalating situation or as other conditions warrant. A State Emergency Response Team Liaison, typically a Division of Emergency Management Area Coordinator, is dispatched to the licensee's Emergency Operation Facility until the arrival of the Advanced Team. At that point the Area Coordinator will be dispatched to one of the Risk Counties Emergency Operations Centers to function as the State Emergency Response Liaison. Pre designated State personnel located in the general area of the emergency will be dispatched to their normal work stations to implement emergency directives.

Staff for a Level II Activation will include, but will not be limited to:

1. State Coordinating Officer
2. State Emergency Response Team Chief
3. An Operations Section Chief
4. An Information and Planning Section Chief
5. Communications Supervisor
6. State Warning Point Communications Operator(s)
7. Core State Emergency Support Functions Personnel

B. County Emergency Operations Centers

Each Risk and Host County affected by a radiological emergency will establish a County Emergency Operation Center to coordinate the County emergency response. Key County officials will report to the County Emergency Operation Center at the time of an emergency. The location of the County Emergency Operation Centers are identified in the respective site appendices.

County Emergency Operation Centers, at a minimum, are partially activated upon declaration of an Alert emergency classification. Full activation of county Emergency Operation Centers takes place upon declaration of a Site Area Emergency or General Emergency; however, full activation may take place at any time during a rapidly escalating situation or as other conditions warrant.

Staff will include, but not be limited to:

1. County Emergency Management Director, or Designee
2. County emergency response agency representatives
3. Additional staff in accordance with county procedures for emergency operations
4. A State Emergency Response Team Liaison
5. The State Department of Health will dispatch a liaison to Risk counties to interpret/explain information regarding plant conditions, releases, plume projections, and additional information.

C. Licensee Emergency Operations Facilities

Each licensee will establish an Emergency Operations Facility for the management of overall licensee emergency response, including coordination with federal, State and local officials. The Area Coordinator will be dispatched to the Emergency Operation Facility upon activation and serve as the State Emergency Response Liaison until the arrival of the Advance Team. An Advance Team and selected State agency personnel will be dispatched to the licensee's Emergency Operation Facility

to facilitate face-to-face coordination of State, county and licensee emergency response activities.

The Emergency Operation Facilities for each nuclear power plant are located as follows:

Crystal River - Progress Energy training facility, West Venable Drive, 1.2 miles east of U.S. 19, adjacent to the Crystal River airport.

Turkey Point - Florida Power and Light corporate headquarters, 9250 West Flagler, Miami, Florida.

St. Lucie - Midway substation site on S.R. 712, one-quarter mile west of I-95.

The licensee will activate the Emergency Operations Facility upon declaration of a Site Area Emergency or General Emergency and may activate at an Alert, or as emergency conditions warrant. The staffing pattern for the State's Forward State Emergency Response Team will be determined by the State Coordinating Officer and the State Emergency Response Team Chief prior to deployment.

Staff in the Emergency Operations Facility will include, but not be limited to:

1. Forward State Emergency Response Team Chief or an Advance Team Leader; State Public Information Officer; Operations Chief; Information and Planning Chief; Communications Officer; Technical Advisors (Emergency Support Function 8 -Department of Health Operations Officer and staff), and staff.
2. Licensee representatives and staff
3. Risk County representatives
4. Host/Ingestion Pathway Zone counties as warranted or requested by the State Coordinating Officer/Forward-State Emergency Response Team Chief

III. Transportation to Licensee's Emergency Operations Sites

The Advance Team will travel by the most expeditious manner from Tallahassee to the Emergency Operation Facility for each of the nuclear power plants in Florida.

Department of Health personnel assigned to field monitoring teams and the field laboratory support team will travel from Orlando to each of the sites with the Mobile Emergency Radiological Laboratory in accordance with Department of Health procedures. Due to the distance involved, a field team consisting of Department of Health, health physicists has been organized in Miami and will travel in accordance with established procedures to an emergency at the Turkey Point Nuclear Power Plant.

IV. Joseph M. Farley Power Plant

The Joseph M. Farley Power Plant is located 16 miles north of the Florida-Alabama border on the Chattahoochee River. Florida is not included within the 10-mile Emergency Planning Zone. If offsite radiological monitoring is necessary in the Ingestion Pathway Zone, the Department of Health field monitoring teams will be coordinated through the Mobile

Emergency Radiological Laboratory which may be docked at the fire station located at the Marianna, Florida airport.

The following minimum staff will be dispatched to the Alabama Forward Emergency Operations Center located at the Houston County Courthouse in Dothan, Alabama:

- a. Department of Health, Bureau of Radiation Control, Operations Officer
- b. State Emergency Response Liaison
- c. Division of Emergency Management Public Information Officer
- d. A State Communications Operator from the State Emergency Operation Center may be dispatched

The emergency response team will travel to Dothan, Alabama via ground or air transportation. The Alabama Forward Emergency Operations Center is located in the Houston County Courthouse 114 N Oates Street, off of US-231 in downtown Dothan. In addition to the above facility, Southern Nuclear Operating Company has an Emergency Operations Facility for Farley Nuclear Plant located at the corporate headquarters in Birmingham, Alabama. The Department of Health, Bureau of Radiation Control may, depending on accident conditions, send representatives to this facility to perform functions such as dose assessment.

V. Radiological Response Equipment

A. Laboratory Support

The Florida Department of Health has a radio-chemistry laboratory in Orlando with a full range of capability for analysis of environmental media. The major analytical systems and capabilities are outlined in **Figure 8-2**.

The Florida Department of Health maintains a Mobile Emergency Radiological Laboratory that will be dispatched to the vicinity of the power plant at the time of an emergency. The Mobile Laboratory provides a wide range of capability for analysis of environmental media and is provided with pre-designated parking locations near each reactor site. The Mobile Laboratory is self-contained and may be operated without support services when necessary.

The state will analyze collected samples at the Department of Health's Health Physics Lab (Orlando), and the Mobile Emergency Radiological Lab. Additional laboratory assistance may be requested from the United States Department of Energy (Savannah River Operations).

The Mobile Laboratory's major analytical systems and capabilities are outlined in **Figure 8-2**. Implementation of the major analytical systems are explained in the Department of Health's Standard Operating Procedures.

B. Offsite Monitoring Equipment

Offsite monitoring equipment available for the Department of Health's field teams in Orlando and Miami is outlined in **Figure 8-3**. In addition, personnel and radiation emergency response kits are maintained in the Department's offices in Orlando, Lantana, Winter Haven, Tallahassee, Fort Lauderdale, Tampa, Ft. Myers, Pensacola, Jacksonville and Miami. The contents of these kits are outlined in

Figure 8-4. Additional radiation survey instruments used in ongoing program activities are located in the Department's offices in Pensacola, Tallahassee, Ft. Myers, Tampa, Jacksonville, Miami, Orlando, Ft. Lauderdale, Lantana, and Winter Haven. Department of Health personnel will maintain inventories of offsite monitoring equipment. Means for equipment calibration, maintenance, and equipment operations are explained in Department of Health, Bureau of Radiation Control's Standard Operating Procedures.

FIGURE 8-1: STATE EMERGENCY OPERATIONS CENTER FLOOR PLAN

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FIGURE 8-2: RADIOCHEMISTRY LABORATORY AND ANALYTICAL CAPABILITIES

Type of Sample	Type of Analysis	Major Equipment
Air	Gross Beta Gamma Analysis	3 - Low background, gas flow, proportional counters with automatic sample changers
Biota	Gamma Analysis	2 - Gamma spectroscopy systems 1 - Liquid scintillation spectrometer 1 - Thermo luminescent Dosimeter reader system
Milk	Strontium - 89, 90 Gamma Analysis	
Soil	Gamma Analysis	
Vegetation	Gamma Analysis	
Water	Tritium Gamma Analysis	

Mobile Emergency Radiological Laboratory - Bureau of Radiation Control, Orlando

A. Facility

1. The Mobile Emergency Radiological Laboratory is a self-contained mobile laboratory that can be driven to a designated berthing location near the nuclear power plant as designated in the Department of Health's standard operating procedures.
2. The Mobile Emergency Radiological Laboratory is stationed at 2044 All Children's Way, Orlando, FL. 32818.

B. Analytical Capabilities, Major

The Mobile Emergency Radiological Laboratory is equipped with a computer based gamma spectroscopy system. It also carries survey instruments, personnel dosimeters, and other supplies used to outfit field teams and operate a contamination control line.

C. Communications

1. Satellite telephone/radio
2. Local Government Radio Network (39.10 and 39.18 MHz)
3. VHF radio (155.925 MHz)
4. Telephone at prime and alternate berthing stations; phone numbers listed in Emergency Response Directory
5. Facsimile
6. Cellular telephone

FIGURE 8-2: (continued)

D. Equipment

Typical Quantities Description of Inventory Item

- (1) A.C. generator (6.5 KW)
- (1) Gamma spectroscopy system
- (4) Low-vol air samplers
- (2) Ludlum Model 3 with alpha scintillation probes (0- 50,000 cpm)
- (30) Direct reading pocket dosimeters (0-200 mR) with chargers
- (7) Ludlum 2241 with GM pancake probe (0-999,000 cpm)
- (1) Ludlum 177-45 frisking station (0-500,000 cpm)
- (3) Eberline ASP-1 with GM pancake probe (3,600,000 cpm)
- (25) Electronic Personal Dosimeters (0-1600 R)
- (1) Ludlum Model 52 Portal Monitor
- (8) CDV 718 Radiac sets (0-9999 R/hr)

Rubber boots

Rubber gloves

Cloth gloves

Cotton coverall

Racal hood units with battery packs and filters

Vinyl shoe covers

FIGURE 8-3: OFFSITE MONITORING EQUIPMENT AVAILABLE TO FIELD TEAMS

A. Orlando

1. Handheld rate meters with alpha scintillation probes and G.M. pancake probes
2. Pressurized ion chambers (0 - 500uR/hour)
3. Portable AC generators (2500 watt)
4. Portable gamma spectroscopy system (2)
5. Neutron instruments (4)

B. Miami

Emergency kit for Miami field team is stored at the Miami-Dade Emergency Operations Center, 9300 NW 41st Street, and other equipment is at the area office.

1. Emergency Kit containing dosimeters, direct reading with chargers, low volume air samplers, and protective clothing.
2. Neutron instrument (1)
3. Portable gamma spectroscopy system (1)

FIGURE 8-4: RADIOLOGICAL EMERGENCY RESPONSE KITS

* Radiological Emergency Response Kits:

- Vinyl boots, large
- Assorted plastic bags
- Barricade tape
- Entrenchment tool
- Masking tape
- Flashlights
- Gloves, disposable
- Rainsuits
- Coveralls
- Plastic sheeting
- Pocket Calculator
- Warning signs
- Niptong
- Sample tags
- Steel measuring tape
- Pocket knife
- Smears and folders
- "D" cell batteries
- Flashlight bulbs

* Available at all regional offices and in field team cars.

Regional offices are located at:

Tallahassee

4042 Bald Cypress Way
Tallahassee, FL

Jacksonville

1045 Riverside Avenue, Suite 230
Jacksonville, FL

Pensacola

6706 N. 9th Avenue
Pensacola, FL

Miami

401 NW 2nd Ave
Miami, FL

Orlando

2044 All Children's Way
Orlando, FL

Orlando

400 West Robinson
Orlando, FL

Ft. Myers

2295 Victoria Avenue
Ft. Myers, FL

Lantana

1199 West Lantana Road
Lantana, FL

Ft. Lauderdale

2421 Southwest Sixth Ave.
Ft. Lauderdale, FL

Tampa

5601 Mariner Street
Tampa, FL

Winter Haven

225 Avenue D Northwest
Winter Haven, FL