

SRS Emergency Management Overview

Melanie LePard

Manager, Emergency Management Savannah River Nuclear Solutions, LLC

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CAB Briefing

Purpose

 This presentation will describe the Savannah River Site's Emergency Management program, including the basis for the program and how the program is established



Mission of Emergency Management

- Protect the health and safety of on and offsite populations
- Protect site property
- Protect the environment



Emergency Management Program

- Planning and Preparedness
- Actions taken in response to events
- Resource management
- Post-event activities, recovery, and return to operation



Identification of Hazards

- Operational events
 - Equipment failure
 - Natural phenomenon
 - Potential or actual releases of hazardous materials
- Safeguards and Security
 - Sabotage
 - Physical security breaches
- Other emergencies not affecting a nuclear process
 - Dam failures
 - Transportation events



Plume Exposure Emergency Planning Zone

- Identifies planning areas for protective actions
- Assists in communications and notifications of protective action recommendations to offsite agencies





Ingestion Exposure Emergency Planning Zone

- Area of approximately 50 mile radius surrounding SRS facilities and the Savannah River Basin to the Atlantic Ocean
- The main exposure hazard is ingestion (eating or drinking) of radioactive or toxic material
- Shared with Plant Vogtle





Plans and procedures address all major aspects of emergency management, such as:

- Ensuring the availability of trained responders
- Notifications and communications, both internal to the site and external
- Hazard analysis and consequence assessment
- Protection of personnel
- Medical Support
- Public Information
- Emergency Facilities and Equipment



Response Capabilities

- ~700-member security force
- ~80-member Fire Department
- Medical Department
- Emergency Response Organization (ERO)
- 30-member Contractor Emergency Management Staff
- U.S. Forest Service Savannah River



Emergency Preparedness

- Training and Drills
 - Initial and annual refresher training
 - Drills provide "hands on" training for emergency responders
- Exercises
 - Annual evaluated exercise conducted
 - All elements of emergency management program validated over a 5-year period



SRS Operations Center

- Receives initial notification of event
- Dispatches first responders
 - Fire Department (Fire, EMS, HAZMAT, rescue)
 - Security (law enforcement, special response teams, canine unit)
- Staffed 24/7; certified by State of SC



Protective Actions

Emergency Duty Officer:

- Implements onsite protective actions
 - Remain indoors
 - Shelter
 - Evacuation
- Determines and provides offsite protective action recommendations, if necessary

Facility or Area Emergency Coordinator:

Implements protective actions for affected facility personnel



Emergency Categorization/Classification

- An event must be categorized as an Operational Emergency as promptly as possible, but no later than 15 minutes after event recognition/identification/discovery.
- Categories of Emergencies:
 - Health and Safety
 - Environment
 - Security and Safeguards
 - Offsite DOE Transportation Events



Emergency Classification Levels

Events causing a release or potential release of Hazardous Materials are further classified as one of the following:

- General Emergency
- Site Area Emergency
- Alert



Notifications

Emergency Notifications

- Events that fall within the emergency categorization/ classification system established by DOE Orders
- Offsite notifications within 15 minutes of declaration for events involving HAZMAT releases; 30 minutes for all other events

Regulatory Notifications

 Events with hazardous material releases that are reportable quantities as defined in Code of Federal Regulations

Courtesy Notifications

 Events that do not fall within the DOE emergency classification system but have potential for significant public or media interest



ERO Activation

- A graded ERO response may be implemented
 - Bring in the resources needed for the event
 - Core ERO includes 18 positions
 - Full staffing at Alert or higher
 - Additional positions may be called in depending on the type of event
- EOC activated within approximately one hour of emergency declaration



Emergency Operations Center (EOC)

- The EOC is staffed by individuals from various organizations across the site. Assigned based on:
 - Normal duties and responsibilities
 - Expertise needed in an emergency
- The focus of the Site Emergency Response Organization is on the overall management of the emergency response



Consequence Assessment

- Consequence assessment staff comprised of subject matter experts, including meteorologists
- Sophisticated computer models to identify areas of concern
- Refined as event progresses
- Results shared with offsite agencies.





Joint Information Center

- Provides a working location where multiple jurisdictions gather to process and disseminate public information during an emergency.
- Located on Gateway Drive



Recovery

- Establish recovery organization
- Develop recovery plan which specifies criteria for resumption of normal operations
- Implement plan
- Investigate root causes of event



Summary

- Programs are in place to ensure operations are effectively managed in the unlikely event of an emergency:
 - Hazards analyzed
 - Emergency plans and procedures in place
 - Train extensively
 - Drill to maintain qualifications and proficiency
 - Evaluate and assess emergency management program
 - Implement improvements

