

U.S. Department of Homeland Security  
FEMA Region 6  
800 North loop 288  
Denton, TX 76209-3698



**FEMA**

January 7, 2009

Mr. Elmo E. Collins, Jr.  
Regional Administrator  
U.S. NRC, Region IV  
612 E. Lamar Blvd., Suite 400  
Arlington, TX 76011-4005

Dear Mr. Collins:

Enclosed is a copy of the radiological emergency preparedness final report for the River Bend Station (RBS) emergency working monitoring and decontamination and medical services drills evaluated on December 10 and 11, 2008. There were two Areas Requiring Corrective Action (ARCAs), that were corrected on the spot, identified during the drills.

Based on the results of the drill, the offsite radiological emergency response plans and preparedness for the State of Louisiana and the affected local jurisdictions are deemed adequate to provide reasonable assurance that appropriate measures can be taken to protect the health and safety of the public in the event of a radiological emergency. Therefore, 44 CFR Part 350 approval of the offsite radiological emergency response plans and preparedness for the State of Louisiana site-specific to RBS will remain in effect.

A copy of this report was provided electronically to Ms. Lisa Gibney, REP HQ Branch Chief and HQ Project Officer, U.S. Nuclear Regulatory commission, in Washington, D.C. Should you have questions, please contact Lisa Hammond, Regional Assistance Committee Chair, at (940) 898-5199, or Elsa Lopez, Radiological Emergency Preparedness Site Specialist, at (940) 898-5308.

Sincerely,

  
Lisa Hammond  
RAC Chairman

Enclosure

cc: NRC HQ – Lisa Gibney  
DHS-FEMA-HQ – Vanessa Quinn  
DHS-FEMA-HQ – Craig Fiore  
LDEQ – Jeffrey Meyers  
NRC Document Control Desk  
GOHSEP – Mark A. Cooper  
RBS – Joseph Leavines

JAN 12 2009

River Bend Station

Drill Report - 2008-12-10

Final Report - Radiological Emergency

Preparedness (REP) Program

2009-01-07



**FEMA**





# FEMA

## Drill Report

### River Bend Station

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Drill Date: 2008-12-10

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Report Date: 2009-01-07

U.S. DEPARTMENT OF HOMELAND SECURITY

Federal Emergency Management Agency

REP Program

800 North Loop 288

Denton, TX 76209

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# 1. Executive Summary

On December 10 and 11, 2008, out-of-sequence Emergency Worker Monitoring and Decontamination Center and Medical Services drills were conducted for the River Bend Station (RBS), located near St. Francisville, Louisiana. Personnel from the U.S. Department of Homeland Security/Federal Emergency Management Agency (DHS/FEMA) Region VI, evaluated all activities. The purpose of the drills was to assess the level of preparedness of local responders to react to a simulated radiological emergency at River Bend Station. The previous medical drill at this site was conducted on October 25, 2006, while the emergency worker monitoring and econtamination drill was conducted on June 2, 2002. The previous plume exercise was conducted on June 11, 2008.

Personnel from the State of Louisiana, River Bend Station, Point Coupee Parish, East Baton Rouge Parish, Our Lady of the Lake Medical Center, and Acadian Ambulance Service participated in the drills. Cooperation and teamwork of all the participants was evident during the drill and DHS/FEMA wishes to acknowledge these efforts.

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This report contains the final evaluation of the out-of-sequence drills. The participants demonstrated knowledge of their emergency response plans and procedures and adequately demonstrated them. There were no Deficiencies. Two Areas Requiring Corrective Action (ARCAs) that were corrected on the spot were identified during the drills.

## 2. Introduction

On December 7, 1979, the President directed the Federal Emergency Management Agency (FEMA) to assume the lead responsibility for all off-site nuclear planning and response. FEMA's activities under the REP Program are conducted pursuant to 44 Code of Federal Regulations (CFR) Parts 350, 351 and 352. These regulations are a key element in the Radiological Emergency Preparedness (REP) Program that was established following the Three Mile Island Nuclear Station accident in March 1979.

Rule 44 CFR 350 establishes the policies and procedures for the DHS/FEMA Region VI Office's initial and continued approval of tribal, state and local governments' radiological emergency planning and preparedness for commercial nuclear power plants. This approval is contingent, in part, on state and local government participation in joint exercises with licensees.

FEMA's Region VI responsibilities in radiological emergency planning for fixed nuclear facilities include the following: Taking the lead in off-site emergency planning and in ~~the view and evaluation of radiological emergency response plans (RERPs) and~~ procedures developed by state and local governments;

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Determining whether such plans and procedures can be implemented on the basis of observation and evaluation of exercises of the plans and procedures conducted by state and local governments;

Responding to requests by the U.S. Nuclear Regulatory Commission (NRC) pursuant to the Memorandum of Understanding between the NRC and FEMA dated June 17, 1993 (Federal Register, Vol. 58, No. 176, September 14, 1993); and

Coordinating the activities of Federal agencies with responsibilities in the radiological emergency planning process:

- U.S. Department of Commerce
- U.S. Nuclear Regulatory Commission
- U.S. Environmental Protection Agency
- U.S. Department of Energy
- U.S. Department of Health and Human Services
- U.S. Department of Homeland Security/FEMA

- U.S. Department of Transportation
- U.S. Department of Agriculture
- U.S. Department of the Interior
- U.S. Food and Drug Administration.

Representatives of these agencies serve on the Regional Assistance Committee (RAC), which is chaired by the Branch Chief of the DHS/FEMA Region VI Office. Formal approval of the RERPs was granted by FEMA on April 25, 1988 under 44 CFR 350.

The findings presented in this report are based on the evaluations of the federal evaluation team, with final determinations made by the DHS/FEMA Region VI Office RAC Chair. The criteria utilized in the evaluation process are contained in:

NUREG-0654/FEMA-REP-1, Rev. 1, Criteria for Preparation and Evaluation of Radiological Emergency Response Plans and Preparedness in Support of Nuclear Power Plants, November 1980; and

Interim REP Program Manual, including the Radiological Emergency Preparedness Exercise Evaluation Methodology (August 2002).

Section III of this report, entitled "Drill Overview," presents basic information and data relevant to the drills. This section of the report contains a description of the Emergency Planning Zone (EPZ), a listing of all participating jurisdictions and functional entities that were evaluated.

Section IV of this report, entitled "Drill Evaluation and Results," presents detailed information on the demonstration of applicable evaluation areas at each jurisdiction or functional entity. If applicable, this section also contains: (1) descriptions of all Deficiencies and Areas Requiring Corrective Actions (ARCAs) assessed during the drills and recommended corrective actions and (2) descriptions of unresolved ARCAs assessed during previous exercises and the status of the OROs efforts to resolve them.

## 3. Drill Overview

This section contains data and basic information relevant to the December 10 and 11, 2008, Emergency Worker Monitoring and Decontamination and Medical drills to test the offsite response capabilities in the area surrounding the River Bend Station (RBS). This section of the report includes a description of the Emergency Planning Zone and a listing of all participating jurisdictions and functional entities that were evaluated.

### 3.1. EPZ Description

The area within 10 miles of RBS is located in the State of Louisiana within the confines of West and East Feliciana Parishes, West and East Baton Rouge Parishes, and Pointe Coupee Parish. This area is referred to as the Emergency Planning Zone (EPZ).

The total population of the EPZ is 41,568 (Daytime Peak Season). Besides schools and churches, there are a few other special facilities. There are two hospitals within the 10-mile EPZ including the West Feliciana Parish Hospital (an MS-1 hospital). There are also four incarceration facilities. There are two paper mills, Tembec in West Feliciana and Georgia-Pacific in East Baton Rouge. In Pointe Coupee Parish, there are two electricity-generating plants, Big Cajun No. 1 and No. 2. Located approximately five miles south-southeast of River Bend Station (RBS) is the Port Hudson State Commemorative Area. Located approximately five miles north of RBS is the Locust Grove State Commemorative Area, and located approximately two miles north is the Audubon Commemorative Park.

There are two major railway lines running through the RBS EPZ. They are the Illinois Central Gulf and the Kansas City Southern Railroads. U.S. Highway 61, Louisiana State Highways 1, 10, 68, and 415 are the major roads within the EPZ.

The 10-mile EPZ includes: RBS, Starhill, Audubon State Historic Site, St. Francisville, Hardwood, Elm Park, Bains Road, Airport Road, Mahoney Road, Carney, Freeland, Whitman, Tembec Area, Riddle Area, Tunica Swamp, Cat Island, Solitude, Wakefield, Beachwood, Bains, Jones Vaughn Creek Road, Freeland Road, Highway 10 between Carney & Jackson, Williams Gas Pipeline/Transco and the sparsely populated area North of Highway 964 and West Highway 68, Delombre, Port Hudson State Historic Site, Jackson, Asphodel, Green Briar Road, Highway 68 south of Jackson City Limits to Highway 964, Highway 955 between Green Briar Road and Highway 412,



Lindsay, Highway 68 south of Highway 964 to Highway 61, Highway 412 from Highway 955 to Thompson Road, Plains, Flanacher Road, Port Hudson, Bonn, Mount Pleasant, Port Hickey, Waterloo, and Big Cajun No.2, Rougon, Chenal, Ventress, Patins, Leavel, Ploup, Brooks, Schexnayder, and Beaud. The Mississippi River runs through the southwestern portion of the EPZ.

The EPZ is divided into 18 Protection Action Sections (PAS) defined by geographical boundaries for the purpose of emergency response planning and their implementation of protective actions.

## 3.2. Drill Participants

Agencies and organizations of the following jurisdictions participated in the River Bend Station drill:

**Risk Jurisdictions**

East Baton Rouge Parish

Pointe Coupee Parish

**Support Jurisdictions**

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Acadian Ambulance Service

Our Lady of the Lake Regional Medical Center

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Pointe Coupee Fire District #5

Scott Civic Center

**Private Jurisdictions**

River Bend Station

## 4. Drill Evaluation and Results

Contained in this section are the results and findings of the evaluation of all jurisdictions and functional entities which participated in the December 10 and 11, 2008, drill evaluation to test the off site emergency response capabilities of local governments in the 10-mile Emergency Planning Zone surrounding the River Bend Station.

Each jurisdiction and functional entity was evaluated on its demonstration of criteria contained in the exercise evaluation areas as outlined in the Federal Register, Vol. 67, No. 80, "FEMA - Radiological Emergency Preparedness: Exercise Evaluation Methodology" (April 25, 2002). Detailed information on the evaluation area criteria and the extent-of-play agreements for the drill is included as an appendix to this report.

### 4.1. Summary Results of Drill Evaluation

The matrix presented in the table on the following page presents the status of all exercise evaluation area criteria which were scheduled for demonstration during the drill by all participating jurisdictions and functional entities. Exercise criterion are listed by number and the demonstration status of those criterion are indicated by the use of the following letters:

M - Met (No Deficiency or ARCAs assessed and no unresolved ARCAs from prior exercise)

D - Deficiency assessed

A - ARCA(s) assessed or unresolved ARCA(s) from previous exercise(s)

N - Not Demonstrated (Reason explained in Subsection B)

Table 1 - Summary of Drill Evaluation

DATE: 2008-12-10 SITE: River Bend Station, LA A: ARCA, D: Deficiency, M: Met				
		AAS	OLOL	Scott Center M & D
<b>Emergency Operations Management</b>				
Mobilization	1a1			
Facilities	1b1			
Direction and Control	1c1			
Communications Equipment	1d1			
Equip & Supplies to support operations	1e1	M	M	M
<b>Protective Action Decision Making</b>				
Emergency Worker Exposure Control	2a1			
Radiological Assessment and PARs	2b1			
Decisions for the Plume Phase -PADs	2b2			
PADs for protection of special populations	2c1			
Rad Assessment and Decision making for the Ingestion Exposure Pathway	2d1			
Rad Assessment and Decision making concerning Relocation, Reentry, and Return	2e1			
<b>Protective Action Implementation</b>				
Implementation of emergency worker exposure control	3a1	M	M	M
Implementation of KI decision	3b1			
Implementation of protective actions for special populations - EOCs	3c1			
Implementation of protective actions for Schools	3c2			
Implementation of traffic and access control	3d1			
Impediments to evacuation are identified and resolved	3d2			
Implementation of ingestion pathway decisions - availability/use of info	3e1			
Materials for Ingestion Pathway PADs are available	3e2			
Implementation of relocation, re-entry, and return decisions.	3f1			
<b>Field Measurement and Analysis</b>				
Adequate Equipment for Plume Phase Field Measurements	4a1			
Field Teams obtain sufficient information	4a2			
Field Teams Manage Sample Collection Appropriately	4a3			
Post plume phase field measurements and sampling	4b1			
Laboratory operations	4c1			
<b>Emergency Notification and Public Info</b>				
Activation of the prompt alert and notification system	5a1			
Activation of the prompt alert and notification system - Fast Breaker	5a2			
Activation of the prompt alert and notification system - Exception areas	5a3			
Emergency information and instructions for the public and the media	5b1			
<b>Support Operations/Facilities</b>				
Mon / decon of evacuees and emergency workers, and registration of evacuees	6a1			M
Mon / decon of emergency worker equipment	6b1			M
Temporary care of evacuees	6c1			
Transportation and treatment of contaminated injured individuals	6d1	M	M	

## 4.2. Status of Jurisdictions Evaluated

This section provides information on the evaluation of each participating jurisdiction and functional entity, in a jurisdiction-based, issues only format. Presented below is a definition of the terms used in this subsection relative to demonstration status.

**Met** - Listing of the demonstrated exercise evaluation area criteria under which no Deficiencies or ARCAs were assessed during this exercise and under which no ARCAs assessed during prior exercises remain unresolved.

**Deficiency** - Listing of the demonstrated exercise evaluation area criteria under which one or more Deficiencies were assessed during this exercise. Included is a description of each Deficiency and recommended corrective actions.

**Areas Requiring Corrective Action** - Listing of the demonstrated exercise evaluation area criteria under which one or more ARCAs were assessed during the current exercise or ARCAs assessed during prior exercises that remain unresolved. Included is a description of the ARCAs assessed during this exercise and the recommended corrective action to be demonstrated before or during the next biennial exercise.

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**Not Demonstrated** - Listing of the exercise evaluation area criteria which were not demonstrated as scheduled during this exercise and the reason they were not demonstrated.

**Prior ARCAs - Resolved** - Description of ARCAs assessed during previous exercises that were resolved in this exercise and the corrective actions demonstrated.

**Prior ARCAs - Unresolved** - Description of ARCAs assessed during prior exercises that were not resolved during this exercise. Included is the reason the ARCA remains unresolved and the recommended corrective action to be demonstrated before or during the next biennial exercise.

The following are definitions of the exercise issues, which are discussed in this report.

A Deficiency is defined in FEMA-REP-14 as "an observed or identified inadequacy of organizational performance in an exercise that could cause a finding that off-site emergency preparedness is not adequate to provide reasonable assurance that

appropriate protective measures can be taken in the event of a radiological emergency to protect the health and safety of the public living in the vicinity of a nuclear powerplant."

An ARCA is defined in FEMA-REP-14 as "an observed or identified inadequacy of organizational performance in an exercise that is not considered, by itself, to adversely impact public health and safety."

The Department of Homeland Security/Federal Emergency Management Agency(DHS/FEMA) has developed a standardized system for numbering exercise issues (Deficiencies and ARCAs). This system is used to achieve consistency in numbering exercise issues among FEMA Regions and site-specific exercise reports within each Region. It is also used to expedite tracking of exercise issues on a nationwide basis.

The identifying number for Deficiencies and ARCAs includes the following elements, with each element separated by a hyphen (-).

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Plant Site Identifier - A two-digit number corresponding to the Utility Billable Plant Site Codes.

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Exercise Year - The last two digits of the year the exercise was conducted.

Evaluation Area Criterion - A number and letter combination that corresponds with the criteria in the FEMA Evaluation Areas.

Issue Classification Identifier - (D = Deficiency, A = ARCA).

Exercise Issue Identification Number - A separate two (or three) digit indexing number assigned to each issue identified in the exercise.

## 4.2.1. Risk Jurisdictions

### 4.2.1.1. Scott Center Monitoring and Decontamination

- a. MET: 1.e.1, 3.a.1, 6.a.1, 6.b.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: None
- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None

## 4.2.2. Support Jurisdictions

### 4.2.2.1. Our Lady of the Lake Regional Hospital

- a. MET: 1.e.1, 3.a.1, 6.d.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: 6.d.1.

ISSUE NO.: 53-08-6d1-A-02

CRITERION: Facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals. (NUREG-0654, F.2., H.10., K.5.a.b., L.1., 4)

CONDITION: In the decontamination room of the REA, when contamination was detected on the patient's leg wound, the decontamination nurse removed the bandage; however, the nurse did not perform a glove change and continued gathering decontamination supplies. In addition, the hospital's Nuclear Medicine Technician did not properly demonstrate monitoring technique. The monitoring was too fast and too far away from the patient. Lastly, the disposable glove that was used as a protective covering for the probe, was not secured properly and the glove fingers were dangling and brushing against the victim.

POSSIBLE CAUSE: The hospital's Nuclear Medicine Technician did not refer to the procedure for proper monitoring technique. In addition, the decontamination nurse did not perform a glove change after removing the bandage from the leg wound which was found to be contaminated.

REFERENCE: NUREG-0654, K.5.a (Decontamination and Monitoring of

emergency personnel, supplies, instruments, and equipment and for waste disposal) and FEMA-REP-22 (Contamination Monitoring Guidance for Portable Instruments Used for Radiological Emergency Response to Nuclear Power Plant Accidents).

EFFECT: The monitor may not have detected contamination on the patient because she was using the improper monitoring technique. In addition, the decontamination nurse did not perform a glove change after removing the bandage from the patient's wound which was found to be contaminated. The contamination on the nurse's gloves may result in a spread of contamination to other clean areas and persons.

CORRECTIVE ACTION DEMONSTRATED: After play was stopped, a River Bend training officer provided coaching to the REA staff on proper monitoring technique as well as instruction on the importance of glove changes to avoid cross contamination. When the monitor was given the opportunity to re-demonstrate, she was able to survey the patient at the proper monitoring speed and height. In addition, the decontamination nurse performed glove changes as required.

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- c. DEFICIENCY: None
  - d. NOT DEMONSTRATED: None
  - e. PRIOR ISSUES - RESOLVED: None
  - f. PRIOR ISSUES - UNRESOLVED: None

### 4.2.3. Private Jurisdictions

#### 4.2.3.1. Acadian Ambulance Service

- a. MET: 1.e.1, 3.a.1, 6.d.1.
- b. AREAS REQUIRING CORRECTIVE ACTION: 6.d.1.

ISSUE NO.: 53-08-6d1-A-01

CRITERION: Facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals. (NUREG-0654, F.2.,

H.10., K.5.a.b., L.1., 4)

**CONDITION:** The hospital Nuclear Medicine Technician had a Ludlum 3 survey meter with a pancake probe covered with a surgical glove. During the survey it was noted that the technician had not secured the surgical glove fingers which were dangling and brushing against the victims clothing and the distance and speed was not within the guidelines.

**POSSIBLE CAUSE:** Insufficient training and instruction on covering the pancake probe.

**REFERENCE:** NUREG-0654, K.5.a., 5.b, L.1; Acadian Ambulance Emergency Medical Service (EMS) Ambulance Procedure for Response to Radiological Emergencies at River Bend Station, Revision 1.

**EFFECT:** Contamination could have been missed and/or spread on the victim, EMTs or hospital staff.

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**CORRECTIVE ACTION DEMONSTRATED:** The controller (utility representative) called time out, conducted some training and recommended taping the surgical glove dangling fingers. The technician began the survey again and successfully demonstrated surveying the victim with good technique and properly secured the surgical glove fingers.

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- c. DEFICIENCY: None
- d. NOT DEMONSTRATED: None
- e. PRIOR ISSUES - RESOLVED: None
- f. PRIOR ISSUES - UNRESOLVED: None



# APPENDIX 1

## ACRONYMS AND ABBREVIATIONS

EBRP	East Baton Rouge Parish
EMS	Emergency Medical Service
EOC	Emergency Operations Center
EPZ	Emergency Planning Zone
FEMA	Federal Emergency Management Agency
NRC	Nuclear Regulatory Commission
PAS	Protection Action Sections
RAC	Regional Assistance Committee
RBS	River Bend Station
REA	Radiation Emergency Area
REP	Radiological Emergency Preparedness

## APPENDIX 2

### DRILL EVALUATORS AND TEAM LEADERS

DATE: 2008-12-10, SITE: River Bend Station, LA

LOCATION	EVALUATOR	AGENCY
Scott Center Monitoring and Decontamination	Linda Gee *Elsa Lopez	DHS/FEMA DHS/FEMA
Our Lady of the Lake Regional Hospital	*Linda Gee Elsa Lopez	DHS/FEMA DHS/FEMA
Acadian Ambulance Service	*Elsa Lopez	DHS/FEMA
* Team Leader		

# APPENDIX 3

## **RADIOLOGICAL EMERGENCY MEDICAL DRILL EXTENT OF PLAY**

**FOR**

**RIVER BEND STATION**

**OUR LADY OF THE LAKE REGIONAL MEDICAL CENTER**

**AND**

**ACADIAN AMBULANCE SERVICE**

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**September 4, 2008**

**RDRL-EP-08MS1DRIL**

**I**     **PURPOSE**

This simulated radiation medical emergency is being conducted in order to exercise the emergency medical response at Our Lady of the Lake Regional Medical Center and the responding Acadian Ambulance Service. The basic objective is to assess the ability of the hospital and ambulance emergency service to handle contaminated and injured patients.

**II**    **PROPOSED SCHEDULE**

DATE:                             September 4, 2008  
TIME:                             7:00 AM  
LOCATION:                         Our Lady of the Lake Regional Medical Center  
INJURY/ILLNESS:               Laceration – Left ankle

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### **III EVALUATION AREAS AND EXTENT-OF-PLAY**

#### **EVALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT**

##### **Sub-element 1.e – Equipment and Supplies to Support Operations**

**Criterion 1.e.1: Equipment, maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operation. (NUREG-0654, H.7, 10; J.10.a, b, e J.11; K.3.a)**

##### **Locations**

Our Lady of the Lake Regional Medical Center and Acadian Ambulance Service

##### **Extent of Play**

The ambulance crew should be knowledgeable on how to acquire dosimetry kits and potassium iodide (KI) during a declared emergency. The ambulance crew will discuss the method of obtaining dosimetry kits and KI from the parish when an emergency has been declared at the nuclear power plant. The discussion can be accomplished by interview with the evaluator. In accordance with the scenario for this evaluation, the parish will provide necessary dosimetry to the ambulance crew. "Correction-on-the-spot" will be applicable for this demonstration.

#### **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

##### **Sub-element 3.a – Implementation of Emergency Worker Exposure Control**

**Criterion 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers in accordance with the plans and procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. (NUREG-0654, K.3.a, b)**

##### **Locations**

Our Lady of the Lake Regional Medical Center and Acadian Ambulance Service

##### **Extent of Play**

Dosimeters and a simulated TLD will be issued to participating ambulance crew members by East Baton Rouge Parish personnel. Hospital personnel will be issued dosimeters and TLDs at the hospital. "Correction-on-the-spot" will be applicable for this demonstration.

## **EVALUATION AREA 6: SUPPORT OPERATION/FACILITIES**

### **Sub-element 6.d--Transportation and Treatment of Contaminated Injured individuals**

**Criterion 6.d.1: The facility/ORO has the appropriate space, adequate resources, and trained personnel to provide transport, monitoring, decontamination, and medical services to contaminated injured individuals. (NUREG-0654, F.2; H.10; K.5.a, b; L.1, 4)**

#### **Locations**

Our Lady of the Lake Regional Medical Center and Acadian Ambulance Service

#### **Extent of Play**

The ambulance service will pick up the victim at a pre-staged location, the East Baton Rouge Parish Emergency Operation Center. Removal of victim's clothing will be simulated.

At the hospital, decontamination will be demonstrated to the evaluators using methods contained in the hospital procedure. These methods could include soap and water, wipes, or tape. Intrusive bioassay samples will be simulated. No actual surgical procedures, X-ray, drawing of blood samples, etc. will be conducted. "Correction-on-the-spot" will be applicable for this demonstration.

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### **GENERAL EXTENT-OF-PLAY (EOP):**

1. With regard to last minute additions or changes to any previously approved Extent-of-Play, all suggested changes must be forwarded to the RAC Chair for approval.
2. The goal of all offsite response organizations (ORO) is to protect the health and safety of the public. This goal is achieved through the execution of appropriate plans and procedures. It is recognized that situations may arise that could limit the organizations in the exact execution of these plans and procedures.
3. In the event of an unanticipated situation, OROs are permitted to exercise flexibility in the implementation of their plans and procedures in order to successfully achieve the objective of protection of public health and safety and protection of the environment.
4. As a statement of fact, no ORO will deliberately deviate from its plans and procedures with the intent of avoiding responsibility.

#### **References:**

As indicated in the Extent-of-Play Agreement, the State of Louisiana requests the option to correct issues immediately as defined in FEMA Policy Paper, Strategic Review Steering Committee, Initiative 1.5, Correct Issues Immediately, effective March 31, 2000, signed by Kay C. Goss, CEM, Associate Director for Preparedness, Training and Exercises. Acceptable locations/activities for "on-the-spot-correction" are clearly indicated in the extent of play portion under each criterion.

# River Bend Station Extent of Play

# Scott Civic Center Monitoring & Decontamination Station

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## 2008

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**Revision 1  
8/13/2008**

## **EVALUATION AREA 1: EMERGENCY OPERATIONS MANAGEMENT**

Sub-element 1.e – Equipment and Supplies to Support Operations

Criterion 1.e.1: Equipment, maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations. (NUREG-0654, H.7; J.10.a, b, e; J.11; K.3.a)

### Locations

Scott Civic Center Monitoring & Decontamination Station

### Extent of Play

The Scott Civic Center Monitoring & Decontamination Station will be demonstrated on Wednesday, September 3, 2008 at approximately 6:00 PM. Participants may be pre-staged near the monitoring & decontamination station.

Correction-on-the-spot will be considered at these locations at the discretion of and concurrence between the evaluator and the controller. Caution should be exercised to insure that exercise play is not interrupted.

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## **EVALUATION AREA 3: PROTECTIVE ACTION IMPLEMENTATION**

Sub-element 3.a – Implementation of Emergency Worker Exposure Control

Criterion 3.a.1: The OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers in accordance with the plans and procedures. Emergency workers periodically and at the end of each mission read their dosimeters and record the readings on the appropriate exposure record or chart. (NUREG-0654, K.3.a, b)

### Locations

Scott Civic Center Monitoring & Decontamination Station

### Extent of Play

The Scott Civic Center Monitoring & Decontamination Station will be demonstrated on Wednesday, September 3, 2008 at approximately 6:00 PM. Participants may be pre-staged near the monitoring & decontamination station.

Correction-on-the-spot will be considered at these locations at the discretion of and concurrence between the evaluator and the controller. Caution should be exercised to insure that exercise play is not interrupted.



## **EVALUATION AREA 6: SUPPORT OPERATION/FACILITIES**

Sub-element 6.a – Monitoring and Decontamination of Evacuees and Emergency Workers, and Registration of Evacuees

Criterion 6.a.1: The reception center/emergency worker facility has appropriate space, adequate resources, and trained personnel to provide monitoring, decontamination, and registration of evacuees and/or emergency workers. (NUREG-0654, J.10.h; J.12; K.5.a)

### Locations

Scott Civic Center Monitoring & Decontamination Station

### Extent of Play

The Scott Civic Center Monitoring & Decontamination Station will be demonstrated on Wednesday, September 3, 2008 at approximately 6:00 PM. Participants may be pre-staged near the monitoring & decontamination station.

Two emergency workers will be monitored for contamination. A controller will inject data for a simulated contamination level for one emergency worker. Decontamination will be demonstrated using techniques contained in the Fire Department procedure.

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Correction-on-the-spot will be considered at these locations at the discretion of and concurrence between the evaluator and the controller. Caution should be exercised to insure that exercise play is not interrupted.

## **EVALUATION AREA 6: SUPPORT OPERATION/FACILITIES**

Sub-element 6.b – Monitoring and Decontamination of Emergency Worker Equipment

Criterion 6.b.1: The facility/ORO has adequate procedures and resources for the accomplishment of monitoring and decontamination of emergency worker equipment including vehicles. (NUREG-0654, K.5.b)

### Locations

Scott Civic Center Monitoring & Decontamination Station

### Extent of Play

One emergency worker vehicle will be monitored for contamination. A controller will interject data for a simulated contamination level for one vehicle.

Decontamination will be demonstrated using techniques contained in the Fire Department procedure.

Correction-on-the-spot will be considered at these locations at the discretion of and concurrence between the evaluator and the controller. Caution should be exercised to insure that exercise play is not interrupted.

Scott Civic Center Monitoring & Decontamination Station will be demonstrated on Wednesday, September 3, 2008 at approximately 6:00 PM. Participants may be pre-staged near the monitoring & decontamination center.

# APPENDIX 2

## RADIOLOGICAL EMERGENCY MEDICAL DRILL SCENARIO

FOR

RIVER BEND STATION

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OUR LADY OF THE LAKE REGIONAL MEDICAL CENTER

AND

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ACADIAN AMBULANCE SERVICE

September 4, 2008

RDRL-EP-08MS1DRIL

**I PURPOSE**

This simulated radiation medical emergency is being conducted in order to exercise the emergency medical response at Our Lady of the Lake Regional Medical Center and the responding Acadian Ambulance Service. The basic objective is to assess the ability of the hospital and ambulance emergency service to handle contaminated and injured patients.

**II PROPOSED SCHEDULE**

DATE: September 4, 2008  
TIME: 7:00 AM  
LOCATION: Our Lady of the Lake Regional Medical Center  
ILLNESS/INJURY: Motor vehicle accident with leg laceration

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**III EXERCISE CONTROLLERS/EVALUATORS**

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Fred Hurst	EBR EOC	324-6020
Gil Cosnett	OLOL Medical Center	1-856-261-5760

**Sequence of Events:**

0700 Ambulance arrives (EBR EOC)  
0730 Ambulance departs (EBR EOC)  
0800 Ambulance arrives at Our Lady of the Lake Regional Medical Center  
Emergency Room  
0900 Drill Terminated (time may vary based on drill scenario flow)

## NARRATIVE SCENARIO

**NOTE:** The Acadian Ambulance unit will be requested to pre-stage at the East Baton Rouge Parish Emergency Operation Center (EBR EOC), parking lot due to time constraints. The drill will be conducted to allow for an arrival time at Our Lady of the Lake Regional Medical Center at approximately 8:00AM.

The scenario is based on the premise that there has been a radiological release from the River Bend Nuclear Station.

**NOTE:** Our Lady of the Lake Regional Medical Center will be advised of the events at East Baton Rouge EOC by a simulated EOC staff member (controller). This will occur in advance of the hospital notification by the ambulance of the incoming injured contaminated patient. This advisement will be performed by the Hospital Drill Controller (**see Controller Message #1**).

An evacuation has been ordered and the general public is exiting the 10-mile EPZ. In this scenario, an evacuee is injured in a motor vehicle accident and has been transported by relatives to the East Baton Rouge Parish EOC. The evacuee has been surveyed by the EOC staff and has been found to be contaminated.

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Acadian Ambulance has been requested to provide treatment/transportation of a contaminated patient to Our Lady of the Lake Regional Medical Center for treatment.

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The Acadian Ambulance unit has been dispatched to the location of the evacuee at the East Baton Rouge Parish EOC. The initial advisement to the ambulance has been that there is an injured individual located at the EOC that is radiologically contaminated due to a radiological release from River Bend. Once the ambulance arrives the individual should be medically evaluated. A turnover (controller) of the radiological status will be provided to the ambulance personnel. As medical treatment and patient transport evolve, contamination control measures should continue. The ambulance personnel should provide a radio message to Our Lady of the Lake upon their departure from the EOC which should include medical and radiological information as well as an ETA (estimated time of arrival).

Upon notification of the situation, the hospital should prepare the medical and radiological team (anti-contamination clothing and dosimetry) as well as the REA (Radiation Emergency Area).

When the ambulance arrives at the hospital, Emergency Department staff person should meet the patient outside for the purpose of immediately determining the acuity of the case. The patient should be transferred into the REA. The ambulance personnel will be detained temporarily while a member of the hospital's radiological monitoring team surveys the ambulance personnel, equipment, and vehicle.

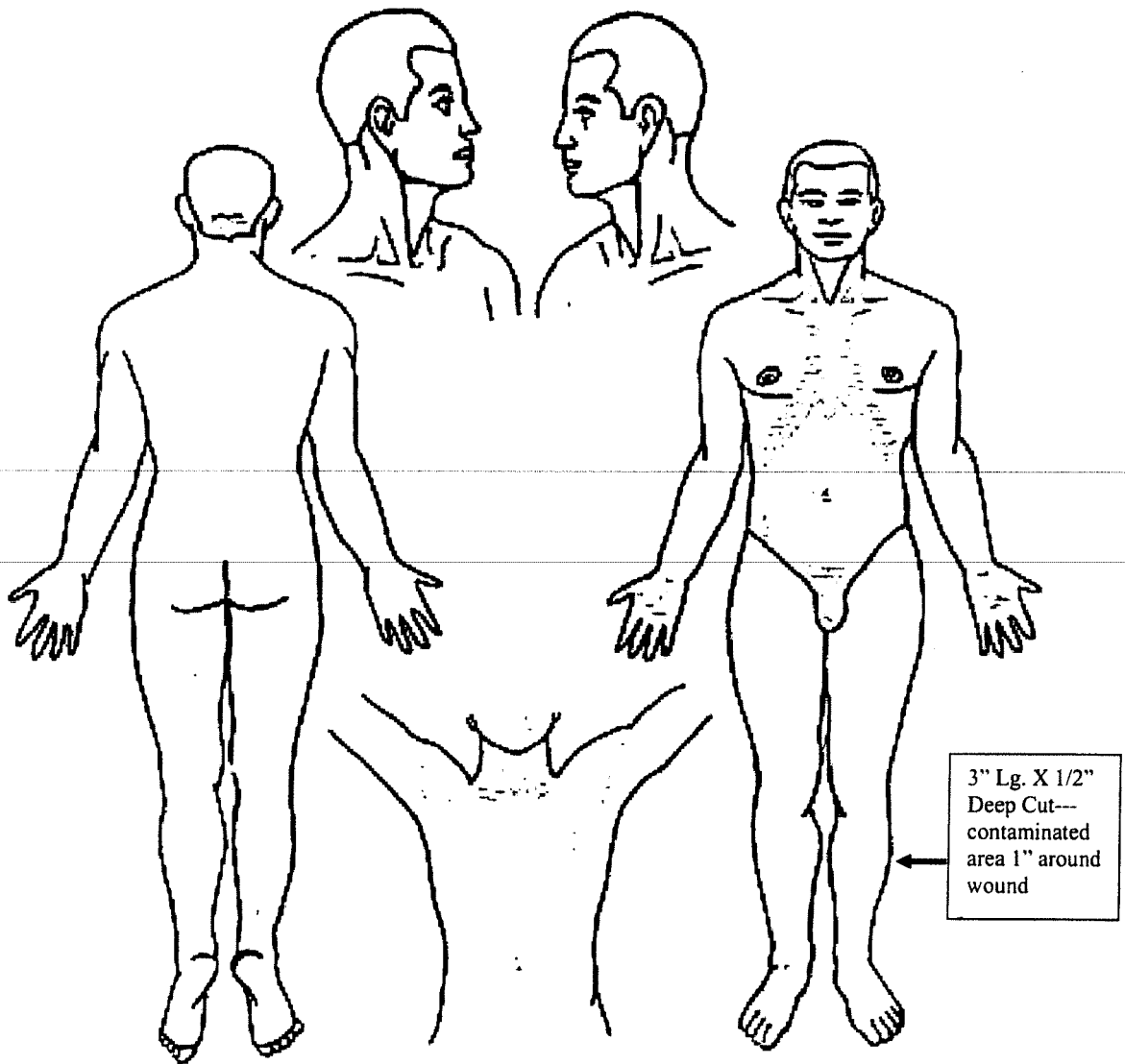
The patient should be evaluated as appropriate for their condition. A hospital radiological monitoring staff person should complete a thorough radiological survey of the patient and the findings should be verbalized and documented. The medical team should proceed with sample taking and decontamination. Radiological samples should be taken from contaminated areas of intact skin and wounds. Facial orifices should be sampled as well.

Decontamination efforts should be carried out until the radiological surveys indicate that background levels are obtained. Particular attention to the decontamination of the open leg wound should be observed.

Following the successful decontamination of the patient, the patient exit process should commence. The patient should receive a full body survey prior to exiting the REA. At this point the staff should exit the REA one at a time and follow the posted Staff Exit chart.



# ANATOMICAL DIAGRAM







**CONTROLLER MESSAGE**

Message # 3: **RADIOLOGICAL DATA**

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**THIS IS A DRILL**

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**Initial Levels**

Leg Wound:                    3000 cpm. (1 mR/hr)

**After 1<sup>st</sup> Decontamination**

Leg Wound:                    1,500 cpm (0.5 mR/hr)

**After 2nd Decontamination**

Leg Wound:                    900 cpm (0.3 mR/hr)

**After 3rd Decontamination**

All areas background: As read on instrument

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**THIS IS A DRILL**

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