



Waterford 3 Steam Electric Station

After Action Report/ Improvement Plan

Drill Date - September 29, 2010

Radiological Emergency Preparedness (REP) Program



FEMA

Published October 22, 2010

Unclassified

Radiological Emergency Preparedness Program (REP)

After Action Report/Improvement Plan

Waterford 3 Steam Electric Station

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Contents

Executive Summary	3
Section 1: Exercise Overview	4
1.1 Exercise Details	4
1.2 Exercise Planning Team Leadership	4
1.3 Participating Organizations	5
Section 2: Exercise Design Summary	6
2.1 Exercise Purpose and Design	6
2.2 Exercise Objectives, Capabilities and Activities	6
2.3 Scenario Summary	6
Section 3: Analysis of Capabilities	7
3.1 Drill Evaluation and Results	7
3.2 Summary Results of Drill Evaluation	7
3.3 Criteria Evaluation Summaries	9
3.3.1 Support Jurisdictions	9
3.3.1.1 West Jefferson Medical Center	9
3.3.2 Private Organizations	9
3.3.2.1 Ochsner Flight Care	9
Section 4: Conclusion	12
Appendix A: Improvement Plan	13
Appendix B: Drill Evaluators and Team Leaders	14
Appendix C: Acronyms and Abbreviations	15
Appendix D: Exercise Plan	16

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EXECUTIVE SUMMARY

On September 29, 2010, an out-of-sequence Medical Services drill was conducted for the Waterford 3 Steam Electric Station (W3), located near Taft, St. Charles Parish, 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 drill was to assess the level of preparedness of local responders to react to a simulated radiological emergency at Waterford 3 Steam Electric Station. The previous medical drill at this site was conducted on September 30, 2009.

The previous exercise at this site was a Plume Exercise conducted on June 24, 2009. The qualifying emergency preparedness exercise was conducted on February 8, 1984. There have been seventeen evaluated exercises, including the exercise on June 24, 2009, plus several drills conducted since 1984.

Personnel from the State of Louisiana, Waterford 3 Steam Electric Station, West Jefferson Medical Center, and Oschner Flight Care participated in the drill. Cooperation and teamwork of all the participants was evident during the drill and DHS/FEMA wishes to acknowledge these efforts.

This report includes the identification of any exercise issues and recommendations for corrective action where appropriate.

This report contains the final evaluation of the out-of-sequence drill. The participants demonstrated knowledge of their emergency response plans and procedures and adequately demonstrated them. There were no Deficiencies, one Area Requiring Corrective Action (ARCAs), and one Plan Issue were identified during the drill.

SECTION 1: EXERCISE OVERVIEW

1.1 Exercise Details

Exercise Name

Waterford 3 Steam Electric Station

Type of Exercise

Drill

Exercise Date

September 29, 2010

Program

Department of Homeland Security/FEMA Radiological Emergency Preparedness Program

Scenario Type

Radiological Emergency

1.2 Exercise Planning Team Leadership

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1.3 Participating Organizations

Agencies and organizations of the following jurisdictions participated in the Waterford 3 Steam Electric Station drill:

Private Organizations

West Jefferson Medical Center
Ochsner Flight Care
Waterford 3 Steam Electric Station

SECTION 2: EXERCISE DESIGN SUMMARY

2.1 Exercise Purpose and Design

The DHS/FEMA Region VI Office evaluated the drill on September 29, 2010 to assess the capabilities of local emergency preparedness organizations in implementing their Radiological Emergency Response Plans and Procedures to protect the public health and safety during a radiological emergency involving Waterford 3 Steam Electric Station (W3). The purpose of this report is to represent the results and findings on the performance of the offsite response organizations during a simulated radiological emergency.

2.2 Exercise Objectives, Capabilities and Activities

Exercise objectives and identified Capabilities/REP Criteria selected to be exercised are discussed in the Exercise Plan (EXPLAN), Appendix D.

2.3 Scenario Summary

The drill scenario was developed to evaluate the response of drill participants to an incident at the Waterford 3 Electric Steam Station requiring the transportation, treatment and decontamination of a radiologically contaminated injured individual. The drill scenario provided for the evaluation of the Oschner Flight Care and West Jefferson Medical Center staff.

SECTION 3: ANALYSIS OF CAPABILITIES

3.1 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 September 29, 2010, evaluated drill to test the off-site emergency response capabilities of local governments in the 10-mile Emergency Planning Zone surrounding the Waterford 3 Steam Electric 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.

3.2 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

P - Plan Issue

Table 3.1 - Summary of Drill Evaluation

DATE: 2010-09-29 SITE: Waterford 3 Steam Electric Station, LA M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated			
		Ochsner Flight Care	WJMC
Emergency Operations Management			
Mobilization	1a1		
Facilities	1b1		
Direction and Control	1c1		
Communications Equipment	1d1		
Equip & Supplies to support operations	1e1	P	M
Protective Action Decision Making			
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		
Protective Action Implementation			
Implementation of emergency worker exposure control	3a1	A	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		
Field Measurement and Analysis			
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		
Emergency Notification and Public Info			
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		
Support Operations/Facilities			
Mon / decon of evacuees and emergency workers, and registration of evacuees	6a1		
Mon / decon of emergency worker equipment	6b1		
Temporary care of evacuees	6c1		
Transportation and treatment of contaminated injured individuals	6d1	M	M

3.3 Criteria Evaluation Summaries

3.3.1 Support Jurisdictions

3.3.1.1 West Jefferson Medical Center

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

3.3.2 Private Organizations

3.3.2.1 Ochsner Flight Care

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

ISSUE NO.: 70-10-3a1-A-02

CRITERION: OROs issue appropriate dosimetry and procedures, and manage radiological exposure to emergency workers IAW plans and procedures. Emergency workers periodically and at the end of each mission read and record dosimeter reading. (NUREG-0654, K.3)

CONDITION: Emergency workers were unaware of administrative limits which are included in the current plans and procedures. No radiological briefing was provided to the emergency workers (addressing turnback values) when the dosimetry was issued by the Radiological Protection Technician. The turn back values provided by the Radiological Protection Technician (1R) were higher than the range of the direct reading dosimeters (0-200 mR) that were issued. Upon review of the Ochsner Clinic Foundation Radiation Accident Plan, the administrative limits provided for the emergency workers are 5R for routine treatment and decontamination, 25R for emergency treatment and decontamination, and 100R for life saving treatment and decontamination.

POSSIBLE CAUSE: Emergency workers were unaware of administrative limits contained in plans and procedures and relied on the Radiological Protection Technician to provide this information in the briefing.

REFERENCE: NUREG-0654, K.3

EFFECT: Emergency workers could exceed the pre-determined administrative limits.

RECOMMENDATION: Conduct additional training for emergency workers. Ensure dosimetry provided is appropriate for measuring exposure received in relationship to the turn back values contained within the current plans and procedures. Ensure emergency workers are briefed on the use of dosimetry (to include turn back values) when the dosimetry is issued.

- c. DEFICIENCY: None
- d. PLAN ISSUES: 1.e.1.

ISSUE NO.: 70-10-1e1-P-01

CRITERION: Equipment, maps, displays, dosimetry, potassium iodide (KI), and other supplies are sufficient to support emergency operations.

CONDITION: There was no potassium iodide (KI) available for the emergency workers either on the helicopter or by the W3 Radiological Protection Technician. When interviewed the flight crew stated that they did not know the procedure for obtaining KI and they did not have a copy of the procedure to refer to. There are no provisions for the administration of KI to emergency workers in the current procedure (Ochsner Clinic Foundation Radiation Accident Plan).

POSSIBLE CAUSE: Procedural. Availability and use of KI is not included in the current procedure.

REFERENCE: NUREG-0654, H.7,10;J.10.a,b,e;J.11;K.3.a

EFFECT: Emergency workers are unaware of the use and purpose of KI.

RECOMMENDATION: Update the Ochsner Clinic Foundation Radiation Accident Plan to include provisions for the administration of KI to emergency workers.
Provide additional training to emergency workers on the use and purpose of KI.

- e. NOT DEMONSTRATED: None
- f. PRIOR ISSUES - RESOLVED: None
- g. PRIOR ISSUES - UNRESOLVED: None

SECTION 4: CONCLUSION

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 Waterford 3 Steam Electric Station will remain in effect.

APPENDIX A: IMPROVEMENT PLAN

Issue Number: 70-10-1e1-P-01		Criterion: 1e1
<p>ISSUE: There was no potassium iodide (KI) available for the emergency workers either on the helicopter or by the W3 Radiological Protection Technician. When interviewed the flight crew stated that they did not know the procedure for obtaining KI and they did not have a copy of the procedure to refer to. There are no provisions for the administration of KI to emergency workers in the current procedure (Ochsner Clinic Foundation Radiation Accident Plan).</p>		
<p>RECOMMENDATION: Update the Ochsner Clinic Foundation Radiation Accident Plan to include provisions for the administration of KI to emergency workers. Provide additional training to emergency workers on the use and purpose of KI.</p>		
<p>CORRECTIVE ACTION DESCRIPTION:</p>		
CAPABILITY:	PRIMARY RESPONSIBLE AGENCY:	
CAPABILITY ELEMENT:	START DATE:	
AGENCY POC:	ESTIMATED COMPLETION DATE:	

Issue Number: 70-10-3a1-A-02		Criterion: 3a1
<p>ISSUE: Emergency workers were unaware of administrative limits which are included in the current plans and procedures. No radiological briefing was provided to the emergency workers (addressing turnback values) when the dosimetry was issued by the Radiological Protection Technician. The turn back values provided by the Radiological Protection Technician (1R) were higher than the range of the direct reading dosimeters (0-200 mR) that were issued. Upon review of the Ochsner Clinic Foundation Radiation Accident Plan, the administrative limits provided for the emergency workers are 5R for routine treatment and decontamination, 25R for emergency treatment and decontamination, and 100R for life saving treatment and decontamination.</p>		
<p>RECOMMENDATION: Conduct additional training for emergency workers. Ensure dosimetry provided is appropriate for measuring exposure received in relationship to the turn back values contained within the current plans and procedures. Ensure emergency workers are briefed on the use of dosimetry (to include turn back values) when the dosimetry is issued.</p>		
<p>CORRECTIVE ACTION DESCRIPTION:</p>		
CAPABILITY:	PRIMARY RESPONSIBLE AGENCY:	
CAPABILITY ELEMENT:	START DATE:	
AGENCY POC:	ESTIMATED COMPLETION DATE:	

APPENDIX B: DRILL EVALUATORS AND TEAM LEADERS

DATE: 2010-09-29, SITE: Waterford 3 Steam Electric Station, LA

LOCATION	EVALUATOR	AGENCY
West Jefferson Medical Center	Bill Bischof Linda Gee Elsa Lopez	DHS/FEMA DHS/FEMA DHS/FEMA
Ochsner Flight Care	*Brad DeKorte	DHS/FEMA
* Team Leader		

APPENDIX C: ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
BZ	Buffer Zone
cpm	Counts per Minute
DRD	Direct Reading Dosimeter
ED	Emergency Department
FP	Flight Paramedics
KI	Potassium Iodide
REA	Radiological Emergency Area
RPT	Radiological Protection Technician
W3	Waterford 3 Steam Electric Station
WJMC	West Jefferson Medical Center

APPENDIX D: EXERCISE PLAN

**RADIOLOGICAL EMERGENCY
MEDICAL DRILL SCENARIO (MS-1)**

FOR

WATERFORD 3 STEAM ELECTRIC STATION

September 29, 2010

Participants

**Entergy Operations
West Jefferson Medical Center
Ochsner Flight Care**

I. PURPOSE

This simulated radiation medical emergency is being conducted in order to exercise the emergency medical response in the area of the Waterford 3 Steam Electric Station.

The West Jefferson Medical Center will demonstrate the adequacy of the equipment, procedures, supplies, and personnel of medical facilities responsible for treatment of radiologically contaminated, injured, or exposed individuals.

Ochsner Flight Care will demonstrate the adequacy of vehicles, equipment, procedures and personnel for transporting radiologically contaminated, injured, or exposed individuals.

II. PROPOSED SCHEDULE

DATE: September 29, 2010

TIME: 8:00 AM

LOCATIONS: Waterford 3 Steam Electric Station
West Jefferson Medical Center

INJURY/ILLNESS: Fall victim with blow to the head and fractured left leg

III. DISCLAIMER

Real life emergencies take precedence over this demonstration. In case of an emergency, the demonstration will be cancelled and rescheduled for a later date.

IV. **EVALUATION AREAS AND EXTENT-OF-PLAY-OFFSITE**

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

West Jefferson Medical Center, Ochsner Flight Care

Extent of Play

“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

West Jefferson Medical Center, Ochsner Flight Care

Extent of Play

Area dosimetry will be used in the radiological controlled area at West Jefferson Medical Center.

“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

West Jefferson Medical Center, Ochsner Flight Care

Extent of Play

The Ochsner Flight Care helicopter and the contaminated injured patient will be pre-staged at the West Jefferson Medical Center (WJMC).

The Lead Controller will call Ochsner Flight Care and request the helicopter to respond to W3. The Lead Controller will contact West Jefferson Medical Center (WJMC) and report the medical emergency, he will inform WJMC that the helicopter is responding and will provide an ETA to the W3 plant site. A simulated contaminated injured Waterford 3 worker will be identified and transportation will be simulated by the Ochsner Flight Care helicopter.

If the helicopter is not available due to an actual medical emergency, simulated transportation to the hospital will occur using a utility vehicle. The utility vehicle will pre-stage at the hospital in lieu of the helicopter.

The simulated transportation time for the helicopter to arrive at the plant and to travel to the hospital will be incorporated into play to allow time for the hospital to complete setup and be prepared to receive the patient.

“Correction-on-the-spot” will be applicable for this demonstration.

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.

EXERCISE CONTROLLERS/EVALUATORS

Michael Huskey	Lead Controller
Donna Dawson	Medical Controller
Luke Schaubhut	HP Technician

EXERCISE OBSERVERS

Cheryl Chubb	Helicopter
Greg Gothard	Hospital
Ji Wiley	Hospital

NARRATIVE SCENARIO

At approximately 07:45, a mechanical maintenance technician at Waterford 3 who has been working on the spent fuel crane in the Fuel Handling Building slips and strikes his head on a crane support. He falls off the crane platform. His safety harness breaks his fall, but swings into the side of the spent fuel pool and fractures his left leg. He is unconscious and hanging by his safety harness. The lower part of his body is immersed in the Spent Fuel Pool water and is contaminated.

The Emergency First Aid Team responds and gives first aid and medical care. The patient is removed from the Spent Fuel Pool and primary surveys of the patient are performed. The patient is then transported to the W3 helicopter pad to await the helicopter response.

At 08:00, Ochsner Flight Care is called to request transportation of the patient to West Jefferson Medical Center. After requesting the helicopter, the West Jefferson Medical Center is called to report the medical emergency. The patient's primary survey information and vital signs are provided.

Upon arrival at West Jefferson Medical Center, the patient is taken into the REA, decontaminated, and treated for the injuries. After the treatment has proceeded to the point that the patient would be admitted to the hospital and the helicopter has been surveyed and released, the medical drill will be terminated and a critique of events conducted.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 1A
TO: DRILL CONTROL TEAM TIME: 07:30
FROM: LEAD CONTROLLER T = -0:30

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

1. The Offsite Drill Control Team, HP technician, and simulated injured person assemble at West Jefferson Medical Center (WJMC).
2. The Ochsner Flight Care helicopter will stage at the WJMC helipad.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO.	<u>OFFSITE MEDICAL RESPONSE</u>	CUE CARD	<u>1B</u>
TO:	DRILL CONTROL TEAM	TIME:	07:30
FROM:	LEAD CONTROLLER	T =	-0:30

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

ANTICIPATED RESPONSE

1. The Lead Controller briefs the Drill Control Team, HP technician and patient.
2. The Lead Controller and HP technician "makes up" the patient.
3. The patient is staged at the WJMC helipad.

COMMENTS

1. The HP technician would accompany the patient to the hospital and will be pre-staged with patient.
2. The Drill Control Team will simulate the actions of the EFAT in coordination with the helicopter personnel.
3. There will be no onsite involvement in this drill.

INSTRUCTIONS

The Drill Control Team personnel at West Jefferson Medical Center should position themselves such that they will be able to observe the initial call to the emergency room.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 2A

TO: WEST JEFFERSON MEDICAL CENTER TIME: 08:00

FROM: LEAD CONTROLLER T = + 0:00

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

1. Lead Controller calls Ochsner Flight Care and requests the helicopter to respond to W3 to transport a contaminated injured patient to West Jefferson Medical Center (WJMC).
2. Lead Controller contacts WJMC and reports the medical emergency.
3. Lead Controller informs WJMC that _____ is responding and provides an ETA to the W3 plant site.

PHONE NUMBERS:

Ochsner Flight Care 1-504-842-3198
West Jefferson Medical Center 349-1532 (Request Charge Nurse)

PATIENT INFORMATION:

Vital Sign	EFAT Arrival at scene	5 minutes	10 minutes
Breathing	Shallow, rapid (30)	Shallow, rapid (30)	No change
Pulse	100	90	92
B/P	150/100	145/90	146/90
Pupils:			
Right	Reactive	No change	No change
Left	Reactive	No change	No change
Skin	Cool	Cool	No change
LOC	Unconscious	No Change	No change

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO.	<u>OFFSITE MEDICAL RESPONSE</u>	CUE CARD	<u>2B</u>
TO:	WEST JEFFERSON MEDICAL CENTER	TIME:	08:00
FROM:	LEAD CONTROLLER	T =	+ 0:00

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

ANTICIPATED RESPONSE

1. Ochsner Flight Care helicopter simulates response to the W3 site.
2. West Jefferson Medical Center personnel begin to set up the REA to accept the patient.

COMMENTS

1. Ochsner Flight Care helicopter, HP Technician, and the patient will be staged at the WJMC helicopter pad.
2. On the initial call to WJMC, the Lead Controller will ensure a call back number is provided to the charge nurse.
3. If the Ochsner Flight Care personnel do not have the proper dosimetry, the HP technician will provide dosimetry.

INSTRUCTIONS

1. If Ochsner Flight Care can not respond, refer to instructions on subsequent contingency cue cards.
 2. The Lead Controller will provide the 08:00 patient vital signs information and helicopter ETA to the WJMC Charge Nurse.
-

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 3A

TO: DRILL CONTROL TEAM TIME: Ochsner Flight Care cannot respond

FROM: LEAD CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

CONTINGENCY CUE CARD

Implementing Conditions: If Ochsner Flight Care helicopter is unable to respond to drill,

Contingency Actions: The patient will be transported to West Jefferson Medical Center via company vehicle.

NOTES

The HP technician and patient will pre-stage at the WJMC emergency room, simulating transportation via a utility vehicle.

PHONE NUMBERS:

West Jefferson Medical Center OR 985-783-2949
985-349-1532 (Request Charge Nurse)

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 3B

TO: DRILL CONTROL TEAM TIME: If Ochsner Flight Care cannot respond.

FROM: LEAD CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

ANTICIPATED RESPONSE

The Lead Controller will have the HP technician and patient pre-stage at the WJMC emergency room simulating transportation using a company vehicle.

1. The Lead Controller will notify West Jefferson Medical Center of an ETA for the vehicle.

COMMENTS

In an actual medical emergency at Waterford 3, other means of transportation are available and utilized. To satisfy an objective of this drill, a company vehicle has been staged for use, if required.

INSTRUCTIONS

The Lead Controller will implement this Cue Card if Ochsner Flight Care is unable to respond.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 4A

TO: ALL PARTICIPANTS TIME: If WJMC is unable to participate.

FROM: LEAD CONTROLLER T = N/A

THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations

CONTINGENCY CUE CARD

Implementing Conditions: West Jefferson Medical Center informs the Lead Controller that they are unable to participate in the drill.

Contingency Actions: The Offsite Medical Response Drill will be terminated.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 4B

TO: ALL PARTICIPANTS TIME: If WJMC is unable to participate.

FROM: LEAD CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

ANTICIPATED RESPONSE:

If WJMC cannot participate in the drill, the Lead Controller terminates the drill.

COMMENTS

The West Jefferson Medical Center Emergency Room may be required to respond to an actual medical emergency and be unable to participate in the drill.

INSTRUCTIONS

The Lead Controller will implement this Cue Card if WJMC is unable to participate.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 5A

TO: WEST JEFFERSON MEDICAL CENTER TIME: When helicopter departs W3

FROM: LEAD CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

Lead Controller informs WJMC that the helicopter has departed the plant site. Upon departure of the helicopter, the Lead Controller will provide an update of the patient's condition and the helicopter ETA to WJMC.

1.

Breathing	Shallow (20)
Pulse	100
B/P	144/90
Pupils	Reactive
Skin	Cool
LOC	Conscious

2. The patient's legs are wet from the middle of his thigh to his feet due to contact with water in the area of the spent fuel pool.
3. Contamination on the patient's clothing is 2,000 cpm (20,000 dpm).
4. Contamination of the patient's legs (under clothing) is 500 cpm (5,000 dpm).
5. For the purpose of this drill, the radiological condition of the patient does not change on the way to the hospital.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 5B

TO: WEST JEFFERSON MEDICAL CENTER TIME: When helicopter departs W3

FROM: LEAD CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

ANTICIPATED RESPONSE:

The Lead Controller contacts WJMC and provides the current ETA and updates the patient's condition.

COMMENTS

1. The Lead Controller will obtain the ETA to WJMC from the pilot/driver prior to departure and provide to WJMC.
2. Treatment of the patient by the helicopter personnel is not an objective of this portion of the drill.

INSTRUCTIONS

1. The HP technician and helicopter personnel will be informed that the medical and radiological condition of the patient will remain constant during the trip to the hospital.
2. Lead Controller contacts WJMC and provides an update.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 6A

TO: WJMC EMERGENCY ROOM PERSONNEL TIME: Upon arrival at WJMC

FROM: MEDICAL CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

Provide the following information as appropriate actions are taken:

1. Removal of protective clothing (PC) will eliminate the contamination of the clothing.
2. Irrigation of the contaminated skin areas will reduce the contamination levels to 200 cpm after the first washing and then to <100 cpm after the second washing.

Vital Sign	On arrival at West Jefferson Medical Center	5 minutes after arrival
Breathing	24	20
Pulse	94	90
B/P	140/90	140/90
Pupils	Equal, reactive	No Change
Skin	Cool	No change
LOC	Conscious	Calming

Vital Sign	5 minutes after treatment begins	8 minutes after treatment begins	10 minutes after treatment begins
Breathing	20	20	20
Pulse	90	90	88
B/P	140/88	140/88	140/84
Pupils	No Change	No Change	No Change
Skin	Cool	No Change	No Change
LOC	Calming	Becoming more calm	Calm, alert

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 6B
TO: WJMC EMERGENCY ROOM PERSONNEL TIME: Upon arrival at WJMC
FROM: MEDICAL CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

ANTICIPATED RESPONSE

1. Upon arrival (simulated) at West Jefferson Medical Center, the patient should be removed from the helicopter and taken to the REA.
2. The patient's PC should be removed. The patient should be decontaminated via washing with soap and water.
 - a. Removal of PC will eliminate the contamination of the clothing.
 - b. Irrigation of the wound areas will reduce the contamination levels to less than 100 cpm.
3. Medical treatment will be provided.
4. When the patient has been decontaminated and is medically stable, the hospital staff should prepare to admit him/her to the hospital.

COMMENTS

The spread of contamination should be avoided as the patient is moved from the helicopter to the REA and while treatment is in progress.

INSTRUCTIONS

1. The information on this Cue Card will be provided as the West Jefferson Medical Center staff administers treatment to the patient.
2. Since the staff may take actions not anticipated, the Drill Control Team may adjust the information provided to compensate for their actions.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 7A

TO: HP TECHNICIAN TIME: Upon survey of the helicopter

FROM: MEDICAL MONITOR/CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

1. When the HP technician surveys the helicopter for contamination, the helicopter will be determined to be "clean."
2. If a utility vehicle is used, the HP technician will survey the vehicle for contamination. It will be determined to be "clean."

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD 7B

TO: HP TECHNICIAN TIME: Upon survey of the helicopter

FROM: MEDICAL MONITOR/CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

ANTICIPATED RESPONSE

1. The HP technician will survey the helicopter, or utility vehicle, to determine if it has been contaminated from the transport of the contaminated patient.
2. Upon finding the helicopter to be clean, the HP will release it to return to normal service.

COMMENTS

The helicopter should not be released until it has been surveyed. The HP should attempt to survey the helicopter at the earliest opportunity to allow it to return to service.

INSTRUCTIONS

1. Provide the information on this Cue Card to the HP technician as the helicopter survey is being performed.
2. If the HP does not survey the helicopter, this information will not be provided.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD NO. 8A

TO: ALL PARTICIPANTS TIME: When the patient is ready to admit to the hospital

FROM: MEDICAL CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

Direct the participants to terminate the Offsite Medical drill.

W3 SES EMERGENCY PREPAREDNESS DRILL CUE CARD

DRILL TYPE/NO. OFFSITE MEDICAL RESPONSE CUE CARD NO. 8B

TO: ALL PARTICIPANTS TIME: When the patient is ready to admit to the hospital

FROM: MEDICAL CONTROLLER T = N/A

**THIS IS A DRILL
DO NOT initiate actions affecting normal plant operations**

ANTICIPATED RESPONSE

The participants will restore the REA to pre-drill conditions.

COMMENTS

1. After the patient is moved out of the contaminated area, this portion of the drill will be terminated.
2. One member of the REA team will demonstrate removal of PC prior to terminating the drill.

INSTRUCTIONS

1. After the patient has been decontaminated and ready to admit to the hospital and the helicopter has been released, terminate the treatment portion of the drill.
 2. The hospital personnel involved in treating the patient (inside the REA) will demonstrate removal of PC prior to terminating the drill.
 3. After the REA has been restored to pre-drill conditions, conduct a critique of the drill with the participants.
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