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



May 9, 2011

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 Arkansas Nuclear One medical drill evaluated on April 13, 2011. FEMA Region VI staff evaluated the Pope County Emergency Medical Services–St. Mary's Station in Russellville, Arkansas and the University of Arkansas for Medical Sciences Hospital in Little Rock, Arkansas. There were no Deficiencies or Areas Requiring Corrective Action (ARCA) identified during the drills.

Based on the results of the drills, the offsite radiological emergency response plans and preparedness for the State of Arkansas 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 Arkansas–specific to Arkansas Nuclear One will remain in effect.

A copy of this report was forwarded 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 me at (940) 898-5199, or Tim Pflieger, Radiological Emergency Preparedness Site Specialist for Arkansas, at (940) 383-7325.

Sincerely,

RAC Chair

Enclosure

cc: NRC HQ-Lisa Gibney DHS/FEMA HQ-Vanessa Quinn ADHHS-Bernard Bevill ADHHS-Don Greene ANO Entergy Ops. Inc.-Robert Holeyfield

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# Arkansas Nuclear One

# After Action Report/ Improvement Plan

Drill Date - April 13, 2011

Radiological Emergency Preparedness (REP) Program



Published May 09, 2011

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# Arkansas Nuclear One After Action Report/Improvement Plan

Unclassified Radiological Emergency Preparedness Program (REP)

Published May 09, 2011

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# **EXECUTIVE SUMMARY**

On April 12-13, 2011, an out-of-sequence ambulance drill conducted in Russellville, Arkansas for the Pope County Emergency Medical Services (EMS) - St. Mary's Station followed by an out-of-sequence medical drill was conducted at the University of Arkansas for Medical Sciences (UAMS), Little Rock, Arkansas. Personnel from the U.S. Departmentof 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 Arkansas Nuclear One (ANO). The previous UAMS medical drill at this site was conducted on April 14, 2009. The previous ambulance drill for Pope County EMS - St. Mary's Station was conducted on April 14, 2009.

Personnel from the Pope County EMS, University of Arkansas Medical Sciences, and Arkansas Nuclear One participated in the drills. Evaluation Areas demonstrated included: Equipment and Supplies to Support Operations, Implementation of Emergency Worker Exposure Control, and Support Operations/Facilities Transportation and Treatment of Contaminated Injured Individuals. Cooperation and teamwork of all participants was evident during these drills, and DHS/FEMA wishes to acknowledge these efforts.

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 and no ARCAs identified during the drills.

# **SECTION 1: EXERCISE OVERVIEW**

### **1.1 Exercise Details**

### **Exercise Name**

Arkansas Nuclear One

### **Type of Exercise**

Drill

### **Exercise Date**

April 13, 2011

### Program

Department of Homeland Security/FEMA Radiological Emergency Preparedness Program

### **Scenario Type**

Radiological Emergency

### **1.2 Exercise Planning Team Leadership**

Lisa Hammond RAC Chair FEMA Region VI Technological Hazards Branch Chief 800 North Loop 288 Denton, Texas, 76209 940-898-5199 lisa.hammond@dhs.gov

Timothy Pflieger Federal Planning Team Lead FEMA Region VI Technological Hazards Program Specialist 800 North Loop 288 Denton, Texas, 76209 940-383-7325 timothy.pflieger@dhs.gov

Don Greene State Planning Team Lead Arkansas Department of Health Emergency Planner 4815 West Markham Street Slot 30 Little Rock, Arkansas, 72205 501-661-2808 donald.greene@arkansas.gov

Robert Fowler Utility Planning Team Lead Arkansas Nuclear One Senior Emergency Planner 1448 SR 333 Mail Stop N-ADM-14 Russellville, Arkansas, 72802 479-858-4993 RFOWLER@Entergy.com

### **1.3 Participating Organizations**

Agencies and organizations of the following jurisdictions participated in the Arkansas Nuclear One drill: Risk Jurisdictions Pope County Emergency Medical Services Support Jurisdictions University of Arkansas for Medical Services Private Organizations Entergy Operations, Inc.

# **SECTION 2: EXERCISE DESIGN SUMMARY** 2.1 Exercise Purpose and Design

The DHS/FEMA Region VI Office evaluated the drill on April 12-13, 2011 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 Arkansas Nuclear One (ANO). The purpose of this report is to present 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 Arkansas Nuclear One (ANO) requiring the transportation, treatment and decontamination of a radiologically contaminated injured individual. The drill scenario provided for the evaluation of the University of Arkansas for Medical Sciences (UAMS) and Pope County Emergency Medical Services (EMS) - St. Mary's Station.

# **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 April 12-13, 2011 ambulance and medical drills to test the offsite emergency response capabilities of local governments and support medical centers for Arkansas Nuclear One (ANO).

Each jurisdiction and functional entity was evaluated on the basis of its demonstration of criteria delineated in exercise evaluation area criteria contained in the Federal Register, Vol. 67, No. 80, "FEMA - Radiological Emergency Preparedness: Exercise Evaluation Methodology" (April 25, 2002) and the Interim REP Program Manual. Detailed information on the exercise evaluation area criteria and the extent-of-play agreement used in this exercise are found in Appendix D of this report.

### **3.2 Summary Results of Drill Evaluation**

The matrix presented in Table 3.1, on the following page(s), presents the status of all exercise evaluation area criteria from the REP Program Manual that were scheduled for demonstration during this exercise by all participating jurisdictions and functional entities. Exercise evaluation area criteria are listed by number and the demonstration status of those evaluation area criteria is indicated by the use of the following letters:

M - Met (No Deficiency or Areas Requiring Corrective Actions [ARCAs] assessed and no unresolved ARCAs from prior exercises)

D - Deficiency assessed

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

N - Not Demonstrated

P - Plan Issue

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### Table 3.1 - Summary of Drill Evaluation

DATE: 2011-04-13 SITE: Arkansas Nuclear One, AR M: Met, A: ARCA, D: Deficiency, P: Plan Issue, N: Not Demonstrated		Pope County EMS - St Mary's Station	UAMS
Emergency Operations Management			
Mobilization	1a1	┢──┤	
Facilities	1b1	┟───┤	
Direction and Control	1c1	┝──┤	
Communications Equipment	1d1	$\left  - \right $	
Equip & Supplies to support operations	1e1	M	M
Protective Action Decision Making	0.1		
Emergency Worker Exposure Control	2a1	┟──┤	
Radiological Assessment and PARs	201	┟──┤	
Decisions for the Plume Phase -PADs	262	┟──┤	
PADs for protection of special populations	201	┟──┤	
Rad Assessment and Decision making for the Ingestion Exposure Pathway	201	┟──┤	
Rad Assessment and Decision making concerning Relocation, Reentry, and Return	2e1	┢──┤	
Implementation of emergency worker exposure control	301	м	м
Implementation of KL decision	3b1	IVI	IVI
Implementation of protective actions for special populations. EQCs	301	┼──┤	
Implementation of protective actions for Schools	302	┼──┦	
Implementation of traffic and access control	3d1	┼──┦	
Impediments to evacuation are identified and resolved	342	┼──┤	
Implementation of ingestion pathway decisions - availability/use of info	302	┟──┦	
Materials for Ingestion Pathway PADs are available	3e7	┟──┦	
Implementation of relocation re-entry and return decisions	3f1	╞──┤	
Field Measurement and Analysis	511		
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	5.2		
	Jas		
Emergency information and instructions for the public and the media	5b1		
Emergency information and instructions for the public and the media Support Operations/Facilities	5b1		
Emergency information and instructions for the public and the media Support Operations/Facilities Mon / decon of evacuees and emergency workers, and registration of evacuees	5b1 6a1		

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Temporary care of evacuees	6c1		
Transportation and treatment of contaminated injured individuals	6d1	М	М

### **3.3 Criteria Evaluation Summaries**

### **3.3.1 Risk Jurisdictions**

### 3.3.1.1 Pope County EMS - St. Mary's Station

- 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 Support Jurisdictions**

### 3.3.2.1 University of Arkansas for Medical Sciences Hospital

- 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

# **SECTION 4: CONCLUSION**

Based on the results of the drill, the offsite radiological emergency response plans and preparedness for the State of Arkansas 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 Arkansas site-specific to Arkansas Nuclear One will remain in effect.

### **APPENDIX A: BEST PRACTICES**

### **1. Marking inner glove with an X**

**Summary:** When donning personal protective equipment (PPE), University of Arkansas for Medical Sciences (UAMS) staff marked their inner pair of latex gloves with an "X" to denote that was the inner glove.

**Description:** UAMS staff performed numerous glove changes during operations. When the staff reached their inner gloves (marked with an "X"), the staff knew that extra outer gloves should be donned to aid in contamination control.

# APPENDIX B: DRILL EVALUATORS AND TEAM LEADERS

### DATE: 2011-04-13, SITE: Arkansas Nuclear One, AR

LOCATION	EVALUATOR	AGENCY
Pope County EMS - St. Mary's Station	*Brad DeKorte	DHS/FEMA
University of Arkansas for Medical Sciences Hospital	Brad DeKorte *Tim Pflieger	DHS/FEMA DHS/FEMA
* Team Leader		

# APPENDIX C: ACRONYMS AND ABBREVIATIONS

Acronym	Meaning
ADH	Arkansas Department of Health
ANO	Arkansas Nuclear One
ARCA	Area Requiring Corrective Action
BZ	Buffer Zone
СРМ	Counts Per Minute
DHS/FEMA	Department of Homeland Security/ Federal Emergency Mangement Agency
DRD	Direct Reading Dosimeter
ED	Emergency Department
EMS	Emergency Medical Services
EMT	Emergency Medical Technician
EPZ	Emergency Planning Zone
KI	Potassium Iodide
ORO	Off-site Response Organization
OSL	Optically Stimulated Luminescent
PPE	Personal Protective Equipment
RAC	Regional Assistance Committee
REA	Radiological Emergency Area
REP	Radiological Emergency Preparedness
RPT	Radiation Protection Technician
RSO	Radiation Safety Officer
UAMS	University of Arkansas for Medical Sciences

Arkansas Nuclear One

# **APPENDIX D: EXERCISE PLAN**

#### Arkansas Nuclear One 2011 UAMS MS-1 Drill April 12-13, 2011 Extent-of-Play (EOP) Agreement Between The Arkansas Department of Health's Nuclear Planning and Response Program and FEMA Region VI

#### **EVALUATION AREA 1**

#### **Emergency Operations Management**

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

#### INTENT

This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (ORO) have emergency equipment and supplies adequate to support the emergency response.

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

- Locations: University of Arkansas for Medical Sciences (UAMS); Pope County EMS (St Mary's Station), Russellville
- EOP: 1. It is Arkansas policy to issue KI only to Emergency Workers (EW) and institutionalized individuals in the 10-mile EPZ.
  - 2. Meters or DRDs that have "bar code" labels can have their calibration and operational check dates verified with the master database maintained by the NP&RP HP. Each meter will have a range sticker attached.
  - 3. The quantities of Dosimetry and the quantities and expiration of KI will be confirmed by evaluators at locations identified in plans.
  - 4. Meters that do not have "bar code" labels will have appropriate calibration stickers attached.

ARCA:	None

#### **EVALUATION AREA 3**

#### **Protective Action Implementation**

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

#### INTENT

This sub-element is derived from NUREG-0654, which provides that OROs should have the capability to provide for the following: distribution, use, collection, and processing of direct-reading Dosimetry and permanent record Dosimetry; the reading of direct-reading Dosimetry by emergency workers at appropriate frequencies; maintaining a radiation dose record for each emergency worker; and establishing a decision chain or authorization procedure for emergency workers to incur radiation exposures in excess of protective action guides, always applying the ALARA (As Low As is Reasonably Achievable) principle as appropriate.

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: University of Arkansas for Medical Sciences (UAMS); Pope County EMS (St Mary's Station), Russellville
- EOP: 1. EMS crews will use gloves and booties as necessary. Hospital teams will wear "anti-Cs" IAW hospital plans.
  - 2. Dosimetry and KI will be issued IAW plans.
  - 3. The RO or designee will demonstrate the EW briefing, record keeping, and procedures for issuing and returning dosimetry and KI. The use of KI will be simulated.
  - 4. <u>Correction-on-the-spot</u> will be considered at these locations at the discretion of and concurrence between the evaluator and the controller. Caution should be exercised to ensure that exercise play is not interrupted.

ARCA: NONE

# Sub-element 6.d - Transportation and Treatment of Contaminated Injured Individuals INTENT

This sub-element is derived from NUREG-0654, which provides that Offsite Response Organizations (ORO) should have the capability to transport contaminated injured individuals to medical facilities with the capability to provide medical services.

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: Pope County EMS (St Mary's Station), Russellville
- EOP: 1. The Controller will contact Pope County 911 with the exercise message. Communication between the ambulance and the EMS dispatch will be demonstrated. EMS dispatch will discuss procedures for passing information to UAMS.
  - 2. The EMS will pick up the patient at the plant. Prior to transfer of the patient, EMS and/or Entergy personnel will demonstrate monitoring the patient. After patient transfer to the training center, the EMS will demonstrate vehicle monitoring. The ambulance will not be draped.
  - 3. This EA will be demonstrated at approximately 1500 on April 12, 2011
  - 4. Any real emergency will take precedence.
  - 5. <u>Correction-on-the-spot</u> will be considered at these locations at the discretion of and concurrence between the evaluator and the controller. Caution should be exercised to ensure that exercise
- ARCA: None

Location: U of A for Medical Science (UAMS), Little Rock

- EOP: 1. This EA will be demonstrated at approximately 1000 on April 13, 2011
  - 2. Any real emergency will take precedence.
  - 3. The patient will be transported to UAMS via a non-emergency vehicle.
  - 4. Radiation decontamination, monitoring and contamination control will be performed by both UAMS and Entergy personnel.
  - 5. The ANO Controller will contact UAMS Emergency Room with the alerting message approximately one (1) hour prior to patient arrival
  - 6. The ANO Controller will contact UAMS Emergency Room with an update message approximately fifteen (15) minutes prior to patient arrival
  - 7. UAMS personnel will not take any action to prepare for the demonstration of these evaluation areas before the One (1) hour notification.

- 8. No shift change will be performed. A list of second shift Key Personnel will be given to the evaluator.
- 9. The 1<sup>st</sup> shift may be over staffed for training purposes. Some staff identified on the 2<sup>nd</sup> shift roster may play with the 1<sup>st</sup> team. In an actual emergency this over staffing would not be used.

ARCA: None

### POPE COUNTY EMS/UNIVERSITY OF ARKANSAS FOR MEDICAL SCIENCES FEMA EVALUATION MS-1 Emergency Medical Scenario April 12 and 13, 2011

### SCENARIO:

A group of mechanics was replacing a Reactor Coolant Pump seal. In order to disassemble the seal it was attached by slings and shackles to the crane in the work area. As the lift began one of the shackles slipped, causing the load to shift. This shift, in turn, caused one sling to fail and the load dropped and swung out to the side striking one of the mechanics. As the seal plate swung by the mechanic, a metal flange attached to the seal plate ripped across and down the mechanic's right thigh. Then the seal swung back and struck the mechanic knocking him to the floor.

The load was quickly lowered to the floor, and the other mechanics rushed to the downed man's side to provide assistance. The mechanic's protective clothing was torn where the flange had struck his leg, and blood was oozing from the wound. One of the mechanics put his hand on the open wound, and the Control Room was notified that the Emergency Medical Team was needed.

The Emergency Medical Team initiated care of the patient by doing the following:

- 1. Establishing that the seal plate had been secured and the scene was safe.
- 2. Gained control of the patient's cervical spine.
- 3. Placed gauze dressings in place to control bleeding.
- 4. Assessed the patient's airway, breathing, and circulation.
- 5. Determined the patient's level of consciousness.
- 6. Immediately began to cut away the patient's anti-c's.
- 7. Cut away the patient's greens to expose the leg.
- 8. Replaced the gauze with abdominal dressings to control bleeding and protect the wound from further contamination.
- 9. Requested an ambulance be dispatched.

The Emergency Medical Team established that:

- 1. The patient was conscious and complaining of pain to the right leg, and pain to the back of his head.
- 2. The patient was breathing without difficulty, and that he had Radial pulses and distal pulses in both feet.
- 3. The patient had received a jagged cut to the right thigh that started approximately three inches below the top of the thigh and extended laterally down across the leg.
- 4. Emergency Medical Team personnel also assumed that contamination would be present in the wound due to the equipment/material involved in the injury.

### Arkansas Nuclear One Plant Staff and Emergency Medical Team response:

	Action:	Finding/result
1.	Checked scene safety.	Scene safe.
2.	Determined level of consciousness.	Patient is alert and oriented.
3.	Checked airway, breathing, circulation.	Airway open, patient breathing without difficulty. Carotid and radial pulse present.
4.	Assessed bleeding.	Patient is bleeding from the right leg on the upper and lateral portion of the thigh.
5.	Assessed injuries/cut away pants. Removed shoe and sock.	Jagged laceration beginning just below the top of the thigh and extending laterally and downward toward the knee.
6.	Performed quick head-to-toe survey.	<ul> <li>Head</li> <li>No obvious injuries, but the patient complains of some pain to the back of the head.</li> <li>Neck</li> <li>No obvious injuries.</li> <li>Complains of pain to the neck.</li> <li>Chest</li> <li>No obvious injuries.</li> <li>Abdomen, lower back, pelvis</li> <li>No obvious injuries.</li> <li>Lower extremities</li> <li>Right leg as previously noted/no other injuries noted.</li> <li>Upper extremities</li> <li>No obvious injuries.</li> </ul>
7.	Identifies potential cervical spine injury.	<ul> <li>Emergency Medical Team Scene Leader requests ambulance.</li> <li>Drill controller will make notifications to initiate ambulance response.</li> </ul>
8.	Changed from initial 4 X 4 gauze pads to Abdominal dressings.	
9.	Administered oxygen.	
10.	Packaged patient on Long Spine Board, with CID and c-collar.	
11.	Assessed vital signs.	<ul> <li>Pulse-100 regular strong.</li> <li>Respirations-28 unlabored.</li> <li>Skin-Warm, flushed, moist.</li> <li>B/P-132/84.</li> </ul>

	Action:	Fir	nding/result
12.	HP surveyed patient for	•	20,000 ccpm on the right thigh, along the
	contamination.		line of the wound.
		•	15,000 ccpm on the lateral portion of the
			right leg.
		•	10,000 ccpm around the knee and upper
			portion of the calf.
		•	No other contamination found.
13.	Transferred to stokes basket for		
	transport to CA-1.		
14.	Arrived at CA-1. Medical staff		
45	assumes care of the patient.		
15.	Injuries and vital signs are re-	•	No new injuries noted.
	assessed.	•	Pulse-90 regular strong.
		•	Respirations-24 unlabored.
		•	Skin-Warm, dry, normal color.
40	Lisely Division Technicism commune	•	B/P-126/80.
16.	for contamination	•	20,000 ccpm on the right thigh, along the
			Ine of the wound.
		•	right log
			10 000 copm around the know and upper
			nortion of the calf
			No other contamination found
17	Discuss decontamination options	•	Due to injuries, determine that it will be
		•	better for the patient to delay
			decontamination until the patient
			reaches the hospital.
18.	Continue oxygen therapy		•
	Established IV Normal Saline.		
19.	Package patient for transport as	•	Move patient to clean LSB.
	contaminated.	•	Place LSB in disposable body bag.
		•	Close body bag around patient.
		•	Leave bag open at about chin level.
20.	Transfer patient to Pope County	•	Provide Paramedic with Patient
	EMS Paramedic.		Information Form.
		•	Give verbal description of injuries and
			care provided.
		•	Introduce Paramedic to HP who will
		<u> </u>	accompany the patient to hospital.
21.	Pope County EMS receives	•	Re-route ambulance to UAMS in Little
	notification that St. Mary's Hospital		Rock.
	in Russeliville cannot accept the		
	patient.	23	

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	Action:	Finding/result
22.	Plant staff notifies UAMS that Pope County EMS is transporting a contaminated patient to their Emergency Department.	<ul> <li>Drill Controller will make this call approximately 1 hour prior to scheduled drill start time.</li> </ul>

### Pope County Emergency Medical Services: (on-scene/transport)

	Expected Action:	Finding/result
1.	Receive patient information from Emergency Medical Team personnel.	<ul> <li>Patient Information Form.</li> <li>Verbal description of injuries and care provided.</li> <li>Introduce Paramedic to HP who will accompany the patient to hospital.</li> </ul>
2.	Confirm packaging and treatment provided.	<ul> <li>Continue oxygen therapy.</li> <li>Patient packaged in body bag.</li> <li>Wound covered with Abdominal dressing.</li> </ul>
3.	Provide receiving hospital with radio report concerning the patient that is being transported.	See previous information.
4.	Upon arrival at hospital, frisk the patient package and the ambulance for contamination.	<ul> <li>No contamination noted outside of patient containment bag.</li> </ul>
5.	Provide turnover to hospital staff.	See previous information.

# NOTE: Failure to perform all of these actions does not indicate failure on the part of the participant.

### University of Arkansas for Medical Sciences Response

	Expected Action:	Finding/result
1.	Receive notification via telephone	Patient has a large laceration on the
	(drill controller) that a patient is	right thigh, and possible neck and spine
	being brought from Arkansas	injuries.
	Nuclear One. (see #22 of ANO	• The patient is contaminated.
2	Response.	
۷.	County EMS (provided by drill	• See Paramedic Information received
	controller approximately 15	nom Ano personnei.
	minutes prior to arrival at UAMS).	
3.	Receive patient from Pope County	Patient Information Form
	Emergency Medical Services.	• Verbal description of injuries and care
		provided.
4.	Re-assess patient's injuries.	Controller will provide information
		consistent with the scenario.
5.	Provide care as needed based on	<ul> <li>Controller will provide information</li> </ul>
	assessment.	consistent with the scenario/injuries
		noted.
6.	Determine the extent of	<ul> <li>20,000 ccpm on the right thigh, along the</li> </ul>
	contamination involved.	line of the wound.
		• 15,000 ccpm on the lateral portion of the
		10 000 ccpm around the knee and upper
		portion of the calf
		<ul> <li>No other contamination found.</li> </ul>
7.	Decontaminate patient.	For each decontamination attempt the
	·	amount of contamination will decrease
		as follows:
		• 1 <sup>st</sup> attempt—reduce contamination by ½.
		• 2 <sup>nd</sup> attempt with the same method—no
		reduction in contamination.
		• 1 <sup>st</sup> attempt with new method—reduce
		contamination by $\frac{1}{2}$ .
		• 2 <sup>m</sup> attempt with second method—no
		Continuo with other methods until
		Observer indicates the objective bas
		been satisfied.
		<ul> <li>Final survey of the patient shows 250</li> </ul>
		ccpm.
8.	Hospital staff verbalizes continuing	Cover and protect wound, and move
	care of patient.	patient to clean area of the hospital.
		20

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