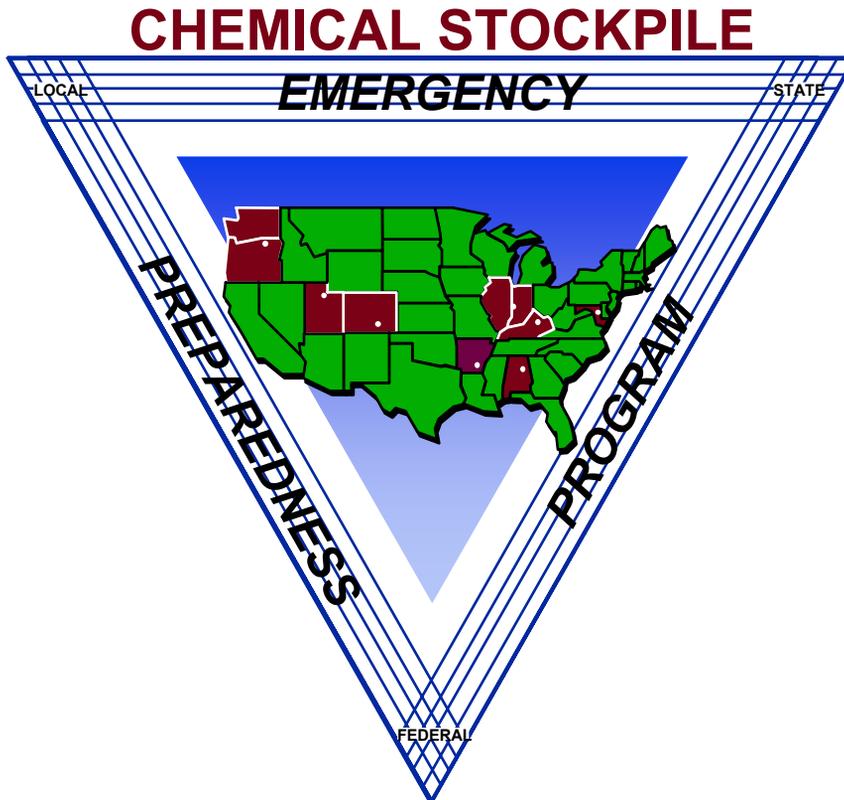


---

**BLUE GRASS COMMUNITY CSEPP EXERCISE 2000  
(BLUE GRASS COMMUNITY CSEPP EX 00)**

**OCTOBER 25, 2000**



**EXERCISE REPORT**

**January 9, 2001**

---

**CHEMICAL STOCKPILE EMERGENCY PREPAREDNESS  
PROGRAM (CSEPP)**

**BLUE GRASS COMMUNITY CSEPP EXERCISE 2000  
(Blue Grass CSEPP EX 00)**

**October 25, 2000**

**EXERCISE REPORT**

**Report Date:**

**January 9, 2001**

**INSTALLATION:**

**Blue Grass Chemical Activity, Richmond, Kentucky  
Blue Grass Army Depot, Richmond, Kentucky**

**RESPONSE ORGANIZATIONS:**

**Commonwealth of Kentucky  
Madison County, Kentucky  
Clark County, Kentucky  
Estill County, Kentucky  
Garrard County, Kentucky  
Jackson County, Kentucky  
Powell County, Kentucky  
Rockcastle County, Kentucky  
Laurel County, Kentucky  
Lexington-Fayette Urban County Government, Kentucky**

**APPROVED BY:**

Dave Wilson  
FEMA Exercise Co-Director  
FEMA Region IV

John Gray  
Army Exercise Co-Director  
SBCCOM CSEPP Office

This Page Intentionally Left Blank.

**BLUE GRASS COMMUNITY CSEPP EXERCISE 2000  
(Blue Grass CSEPP EX 00)**

**EXERCISE REPORT**

**Table of Contents**

<u>Section</u>	<u>Page</u>
TABLE OF CONTENTS.....	i
LIST OF TABLES .....	ii
INTRODUCTION .....	1
EXERCISE PLAY OVERVIEW .....	1
Initiating Event Scenario .....	2
On-Post Activity .....	3
Joint Activity .....	3
Off-Post Activity.....	4
SIGNIFICANT EVENTS TIMELINE .....	4
LISTS OF STRENGTHS, FINDINGS, AND OBSERVATIONS .....	14
ORGANIZATION OF REPORT .....	17
TAB A:    ON-POST ACTIVITIES.....	A-1
TAB B:    JOINT ACTIVITIES .....	B-1
TAB C:    OFF-POST ACTIVITIES .....	C-1
COMMONWEALTH OF KENTUCKY .....	C-3
MADISON COUNTY.....	C-7
CLARK COUNTY .....	C-13
ESTILL COUNTY .....	C-17
GARRARD COUNTY.....	C-21
JACKSON COUNTY .....	C-27
POWELL COUNTY .....	C-31
ROCKCASTLE COUNTY.....	C-37
LAUREL COUNTY.....	C-41
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT.....	C-45

## Table of Contents

<b><u>Section</u></b>	<b><u>Page</u></b>
APPENDIX 1: ACTION PLANS.....	1-1
APPENDIX 2: SERVICE RESPONSE FORCE.....	2-1
APPENDIX 3: ACRONYMS.....	3-1
APPENDIX 4: DISTRIBUTION.....	4-1

## List of Tables

Table 1. Summary of Blue Grass CSEPP EX 00 Objectives.....	1
Table 2. Significant Events Time Line .....	4
Table 3. Tab A Listing.....	14
Table 4. Tab B Listing.....	16
Table 5. Tab C Listing.....	16

**BLUE GRASS COMMUNITY CSEPP EXERCISE 2000**  
**(Blue Grass CSEPP EX 00)**

**EXERCISE REPORT**

**INTRODUCTION**

The Blue Grass Community CSEPP Exercise 2000 (Blue Grass CSEPP EX 00) was conducted on October 25, 2000 to demonstrate the emergency response capabilities of the Blue Grass CSEPP Community and to validate correction of findings identified during past CSEPP exercises.

The requirement for conducting Chemical Stockpile Emergency Preparedness Program (CSEPP) exercises was established in the August 1988 Memorandum of Understanding (MOU) between the Federal Emergency Management Agency (FEMA) and the U.S. Army. Exercise design, planning, evaluation, and reporting guidance is contained in the *Chemical Stockpile Emergency Preparedness Program Exercises* document, dated 19 March 1999.

**EXERCISE PLAY OVERVIEW**

Exercise design and planning for Blue Grass CSEPP EX 00 were accomplished for the Army by the Army Exercise Co-Director and representatives from the Blue Grass Chemical Activity (BGCA) and the Blue Grass Army Depot (BGAD). Design and planning for off-post play were accomplished by the FEMA Exercise Co-Director and representatives from the Commonwealth of Kentucky, Madison, Clark, Estill, Garrard, Jackson, Powell, Rockcastle, and Laurel Counties; and Lexington-Fayette Urban County Government.

Table 1 summarizes the CSEPP exercise objectives that were demonstrated in the exercise. For off-post play, only specified evaluation elements and Points of Review (PORs) of an objective were selected and agreed-upon for demonstration.

**Table 1. Summary of Blue Grass CSEPP EX 00 Objectives**

<b>Jurisdiction</b>	<b>Objectives</b>
BGCA/BGAD	1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15
Commonwealth of Kentucky	1, 2, 4, 5, 6, and 9
Madison County	1, 2, 3, 4, 5, 6, 7, 8, 9, 12, and 15
Clark County	1, 2, 3, 4, 5, 6, 8, and 9
Estill County	1, 2, 3, 4, 5, 6, 9, 12 and 15
Garrard County	1, 2, 3, 4, 5, 6, 8, 9, and 14
Jackson County	1, 2, 4, 5, 6, 9, and 15

<b>Jurisdiction</b>	<b>Objectives</b>
Powell County	1, 2, 3, 4, 5, 6, 9, and 15
Rockcastle County	1, 2, 3, 4, 5, 6, and 9
Laurel County	1, 2, 3, 4, 5, 6, 9, and 15
Lexington-Fayette Urban County Government	1, 4, 6, 8, 9, 12, and 14
JIC	1, 6, 9, and 15

### **Initiating Event Scenario**

BGCA stores chemical munitions, including M55 GB and VX Rockets, in Area F of BGAD, KY. A leaking GB filled M55 rocket was discovered during routine SMI air monitoring operations at igloo F-501 on Tuesday, October 24, 2000. The leaking rocket was the middle rocket of the top layer, top pallet, and aisle stack, near the middle of the igloo. The toxic chemical crew installed the 1,000 CFM chemical agent filtration system at igloo F-501 on Tuesday afternoon. The work plan for October 25, 2000 was to perform a routine leaker containerization operation at igloo F-501.

The meteorological data including wind speed, direction, and atmospheric stability were simulated from 0600 to 1815 on Wednesday, October 25, 2000. The simulated meteorological data was programmed into a Depot meteorological tower. The weather conditions at 0900 were 38.9 degrees F with wind speed of 3.05 mph from 224 degrees (southwest). Actual temperature and humidity were used during the exercise to determine PPE stay times.

At 0707 on Wednesday, October 25, 2000, BGCA issued the work plan MCE to the off-post community. The BGCA MCE 7, movement of one pallet in Level A or greater with three rockets leaking the total contents of agent, was issued.

At 0845, first entry monitoring was successfully completed at igloo F-501. Present at the work site were 8 members of the BGCA/BGAD work force:

- One Supervisor
- Five Toxic Munitions Handlers (including a Forklift Operator and a Ground Guide)
- One Safety Person (QASAS)
- One Security Guard (to unlock the igloo)

The following equipment was present at, or near, the Igloo:

- One electric forklift
- Three crew vehicles
- One rough terrain forklift
- One M12A1 Decontamination Apparatus

- One Real Time Analysis Platform (RTAP)

At 0904 on 25 October 2000, as the forklift was moving the pallet of GB filled M55 rockets from the stack, the forklift malfunctioned. The pallet of rockets banged into the stack. The pallet broke open and the rockets fell to the igloo floor. The falling rockets hit two people in the work crew. The rocket warhead that was to be over packed was breached and leaks its contents on the injured workers and the igloo floor. Two additional rockets fell to the igloo floor and were damaged near the fuse end of the shipping and firing tube.

The following injuries occurred as a result of the accident:

- A Toxic Material Handler was knocked unconscious from the impact of a falling rocket shipping and firing tube. His PPE was not compromised.
- A Toxic Material Handler suffered a simple fracture to her left tibia when she jumped from the forklift. Her PPE was not compromised. She was able to hobble, but with great difficulty and pain. Although injured, she was able to stagger out of the igloo.
- A Toxic Material Handler was struck by the “leaker.” His TAP gear was ripped and his protective mask dislodged. He is able to rapidly re-establish a seal with the protective mask, but is showing signs of liquid and vapor agent exposure.

At 0950, the Security forces detected smoke coming from igloo F-606. Igloo F-606 contains 605 VX filled M55 rockets. The smoke rapidly increased to a large volume, indicating an igloo fire. Large amounts of smoke were observed coming from igloo F-606 until 1100, at which time the smoke began to noticeably decrease in volume. At 1108, smoke was no longer observed coming from igloo F-606.

### **On-Post Activity**

The Blue Grass CSEPP EX 00 satisfied the Army requirement for a major command (MACOM) Initial Response Force Exercise (IRFX) for BGCA/BGAD. All response functions and operations were demonstrated.

### **Joint Activity**

Joint activities included the exchange of information among the participating jurisdictions, and shared communication and automation systems. The Joint Information Center (JIC) was activated and evaluated during this exercise.

## Off-Post Activity

The Commonwealth of Kentucky, Madison, Clark, Estill, Garrard, Jackson, Powell, Rockcastle, and Laurel Counties and the Lexington-Fayette Urban County Government participated in the Blue Grass CSEPP EX 00 conducted on October 25, 2000. The primary areas of activity for responding to the simulated chemical accident on BGAD were in Madison, Clark, Garrard, Estill, Jackson, Laurel, Powell, Rockcastle Counties, as well as the Lexington-Fayette Urban County Government. These jurisdictions demonstrated their response capabilities primarily from their Emergency Operations Centers (EOCs). Waco Elementary of Madison County tested its ability to evacuate students during the exercise. Extensive field activity took place in Lexington-Fayette Urban County. A reception/ decontamination center was established and evaluated in Jacobsen Park.

## SIGNIFICANT EVENTS TIMELINE

A chronological summary of response activities is provided in Table 2, Significant Events Time Line. This listing was developed from observed player actions at each exercise location, as well as incidents introduced by the Simulation Cell (SIMCELL).

<b>Table 2. Significant Events Timeline</b>	
<b>Time</b>	<b>Activity</b>
0845	BGAD - Completes first entry monitoring at igloo F-501
0904	BGAD - STARTEX (Accident at igloo F-501 involving M55 GB-filled rockets)
0905	BGAD - Passes message through SSCC regarding accident at igloo F-501
0905	BGAD - RTAP #353 leaves CLA and proceeds to OCP #1
0907	BGAD - Worker enters igloo and checks ABC's of victim #1 and gets assistance to remove victim from igloo
0908	BGAD - Administers one Mark I injector to victim based on signs/symptoms exhibited; administers first aid and emergency personnel decontamination at the site; removes victim from igloo
0909	BGAD - EOC staff made aware of accident at F-501 by BGCA Commander
0909	BGAD - Completes gross decontamination for Victims #2 and #3
0910	BGAD - Loads Victims #2 and #3 into transport vehicle
0912	BGAD - Activates BGANS declaring Post Only emergency with a PAR of "No Action Required" given to the off post community. No sirens or TARs sounded
0912	Madison, Clark, Garrard, Estill, Jackson, Laurel, Powell, Rockcastle Counties, the Lexington-Fayette Urban County Government and Commonwealth of Kentucky - Receives Post Only Emergency Notification
0912	BGAD - EOC receives update from the SSCC on the status of the injured workers
0912	BGAD - Igloo F-501 doors closed and protective clothing bagged
0913	BGAD - Madison County requests plume plot
0913	Clark County - Dispatch begins manual call-down of EOC personnel in conjunction with official activation of EOC

<b>Table 2. Significant Events Timeline</b>	
<b>Time</b>	<b>Activity</b>
0913	Garrard County - EMD requests dispatch notify Fire and Sheriff Departments
0913	Garrard County - EMD notifies of incident at BGAD
0914	Garrard County - Notifies Fire and Sheriff Department by dispatch
0915	BGAD - Decontaminates (gross) and loads Victim #1; Applies air splint to victim #2
0915	Garrard County - EOC contacts Commonwealth to confirm incident
0916	BGAD - Evacuates all crew workers at igloo F-501 to OCP #1 for advanced care and complete decontamination
0916	BGAD - Establishes roadblocks
0917	Garrard County - Begins automated call down of EOC staff
0917	Powell County - Begins notification of response personnel; CSEPP Coordinator directs EOC activation
0918	BGAD - EOC receives report that a pallet of rockets was dropped with one M55 GB rocket leaking
0918	BGAD - EOC takes control of the emergency response net
0918	BGAD EOC - Installation PAD was to evacuate the restricted area
0918	Laurel County - Deputy EM notifies Mary Mount Hospital of BGAD accident
0919	BGAD - Briefs EOC personnel updating conditions in igloo F-501
0919	Garrard County - Automated call down ends
0920	BGAD - Bus arrives at OCP #1 with Patient #1 and uninjured crew members
0920	BGAD - Processes Patient #1 through PDS
0920	BGAD EOC - Revises the PAR - Post Only emergency (Level II)
0920	Clark County - Receives EMIS information from BGAD providing plume associated with Post Only emergency
0920	Garrard County - Requests FAX of incident details from BGAD
0920	Jackson County - Jackson County calls Madison County and BGAD to verify event level
0920	Laurel County - Deputy EM authorizes Press Release #1 informing public of incident and no risk to Laurel County
0920	LFUCG UK - The Decontamination Team began to set up the Decontamination Area
0922	Clark County - Completes call-down
0923	Powell County - Completes responder notification
0924	BGAD - Notifies Commonwealth of KY ERT
0924	BGAD EOC - Igloo F-501 door is closed
0924	LFUCG EOC - Receives Initial Notification Form FAX from 24-hr warning point
0926	BGAD - Two ambulances arrive at OCP #1
0928	BGAD - Passes Patient #1 to cold side to medical personnel
0928	BGAD EOC - Directs Security to set up TCP's and evacuate personnel from area
0930	BGAD - Passes Patient #2 to cold side to medical personnel

**Table 2. Significant Events Timeline**

<b>Time</b>	<b>Activity</b>
0930	Garrard County - EOC staff begins D2PC display via the LCD projector
0930	LFUCG EOC - CSEPP Coordinator notifies EOC staff to be on standby
0930	LFUCG EOC - DEM Coordinator announces to the staff that the incident was Post Only
0930	LFUCG UK - The ER Manager informed Security they are setting up the Decontamination Area to receive chemical agent casualties
0930	Madison County - Initiates EOC staff recall
0930	Powell County - County Judge arrives and declares EOC operational
0933	BGAD - Provides EOC briefing on the status of igloo F-501
0934	BGAD – Passes Patient #3 to cold side to medical personnel
0934	LFUCG EOC - Receives plume FAX from BGAD
0934	Rockcastle County - Commonwealth verifies Post Only status
0935	Clark County - EMD briefs EOC staff
0935	Jackson County - Receives FAX from BGAD confirming Post Only event; EMD requests Jackson County Judge respond to EOC
0935	LFUCG UK - Two Decontamination Team members suited and connected to their supplied air source
0935	Rockcastle County - EOC Operational
0937	Laurel County - All response agencies notified and placed on standby; implementing procedures reviewed
0937	Laurel County - Press Release #1 approved and released
0938	Jackson County - Judge arrives at the EOC and signs Emergency Declaration
0939	BGAD EOC - Briefs Security staff that 13 personnel remain in CLA
0940	LFUCG UK - Two security officers arrive and secure the ER
0941	BGAD - PDS crew and RTAP Operator begin processing through OCP #1
0942	Garrard County - Initial Notification Form displayed via overhead projector (no information provided)
0942	LFUCG UK - The Decontamination Area is ready to receive patients
0944	BGAD - Ambulance departs OCP #1 with Patient #1
0944	BGAD - Security passes message to roving patrol to continue check of F block
0945	BGAD - Loads Patient #3 on ambulance; Patient #2 on hold in medical area
0945	Clark County - EOC is operational
0946	Jackson County - Receives FAX of wind direction and speed from BGAD
0947	Clark County - Clark County and City of Winchester declarations of emergency prepared, but not issued
0948	LFUCG UK - Decontamination Team practices out-processing Decontamination Team members and donning PPE
0950	BGAD - BGCA ambulance transports Patients #1 and #3 to main gate pending arrival of Madison County ambulance for transport to Patty A. Clay Hospital
0950	BGAD - Roving patrol reports smoke visible from “Row 6” to SSSC

**Table 2. Significant Events Timeline**

<b>Time</b>	<b>Activity</b>
0950	BGAD EOC- SSCC reports smoke in the area to EOC
0950	Garrard County - Judge notified of Post Only incident
0950	Laurel County - Staff discuss possibility of opening shelter at Laurel High School for spontaneous evacuation from Madison County
0953	BGAD - Ambulance arrives at main gate
0954	BGAD - OCP Commander checks PPE stay times
0954	BGAD - RTAP Operator dispatched to OCP #1
0954	BGAD EOC - Smoke in the area reported to Operations Officer
0954	Garrard County - EMD advises Mayor of Post Only emergency at BGAD
0957	BGAD EOC - Report of smoke in F-600 row of CLA
1000	BGAD - Smoke is coming from vent of igloo F-606
1001	BGAD - Begin discussion concerning the opening of the JIC
1002	BGAD - Smoke from igloo F-606 reported to security patrol
1003	BGAD EOC - Hazard Analysis team plots downwind hazard based on night watch
1003	BGAD - The ORO has not been notified because she was receiving phone calls
1004	BGAD EOC - Hazard Analysis team plots downwind hazard based on 605 VX Rockets
1005	Garrard County - Fire department representative departs EOC
1005	Madison County - EOC is operational
1006	BGAD - BGANS activated to report community level emergency in igloo F-606
1006	Community Level Emergency Notification received at Madison, Clark, Garrard, Estill, Jackson, Laurel, Powell, Rockcastle Counties, the Lexington-Fayette Urban County Government and the Commonwealth of Kentucky
1007	BGAD EOC - PAR for VX igloo fire provided to off-post EMAs (evacuate zones 1B, 1C, 2B, and 2C)
1007	Clark County - DES establishes TCPs and activates of decontamination center, reception center, and sheltering locations
1007	LFUCG TCP - Lexington police van arrives Jacobson Park and places sign showing directions to the "Reception Center"
1008	Laurel County - Staff verifies affected zones; no plan to evacuate to Laurel
1009	BGAD - RTAP #352 arrived at OCP #1
1010	BGAD - 3 <sup>rd</sup> RTAP arrives to monitor the PDS
1010	BGAD - EOC provides briefing to EOC staff
1010	Estill County - Dispatcher notified EMD of 1006 depot call
1012	Madison County - Sirens and TARs activated
1012	BGAD - Sirens sounded
1012	BGAD EOC - IRF Commander decides to request the SRF
1012	Clark County - EBS message received
1012	Jackson County - Security established at EOC
1012	Madison County - Makes Protective Action Decision (PAD)

**Table 2. Significant Events Timeline**

<b>Time</b>	<b>Activity</b>
1012	Madison County - Waco Elementary School receives TAR warning
1013	Jackson County - Activates EOC
1013	Jackson County - Initiates manual call-down of response personnel
1014	Estill County - Dispatcher pages emergency personnel of EOC activation
1015	Laurel County - State Area Manager verifies with State EOC that evacuees are going to Powell County
1015	LFUCG EOC - receives Initial Notification Form FAX regarding igloo fire from 24-Hr warning point
1015	LFUCG UK - The hospital hazardous materials management (waste management) staff is tasked with pumping out contaminated run off from the decontamination operation
1017	KyEM - EOC is operational
1017	Madison County - Buses in place to evacuate Waco Elementary School
1017	Madison County - EOC notifies Waco Elementary School to evacuate
1017	Madison County - Waco Elementary School conducts accountability procedures and evacuation in ten minutes
1018	LFUCG EOC - Begins call down procedure
1020	BGAD - Patient #2 is in ambulance at OCP #1
1020	Laurel County - PAD "No Action Required"
1020	LFUCG TCP - Lexington police establishes TCP at the entrance of Jacobson Park (at the intersection of Kentucky State Road 418 and US 25/421)
1020	LFUCG TCP - Police Command Post Vehicle establishes Reception Center at pavilion # 1
1022	Madison County - PIO broadcast FAXES the first EAS message
1023	LFUCG EOC - DEM Operations Officer briefs staff on activation procedures and status of event
1024	Clark County - Clark County and Winchester issues emergency declarations
1024	Laurel County - Deputy EM authorizes Press Release #2 on incident status
1024	LFUCG EOC - Completes EOC call down
1025	BGAD - BGANS updates PAR for igloo F-606 (evacuate zones 1B, 1C, 2B, 2C, 3B, Estill E-1 and E-2)
1025	BGAD - Clear readings inside of OCP #1
1025	Garrard County - FAXES EAS message to WRSL and WRNZ
1025	Garrard County - EMD states no effects on Garrard County
1025	Madison, Clark, Garrard, Estill, Jackson, Laurel, Powell, Rockcastle Counties, Lexington-Fayette Urban County Government and Commonwealth of Kentucky - Receives updated PAR
1027	KyEM - EOC sent Madison County PAD to all Counties

<b>Table 2. Significant Events Timeline</b>	
<b>Time</b>	<b>Activity</b>
1027	KyEM - EOC confirmed the PAR with BGAD
1027	Madison County - Buses depart Waco Elementary School; EOC notified that evacuation completed
1028	Laurel County - Staff briefing and discussion: Initiates simulated call down; opens Reception Center at National Guard Armory; Red Cross opens shelter at Laurel County High School; establishes TCPs at five locations to aid spontaneous evacuees
1028	LFUCG EOC - CSEPP Coordinator, DEM Operations Officer and Director move from regular office to temporary EOC
1028	Powell County - Issues a Declaration of Local Emergency
1029	Clark County - DES orders Public Works to close ramps off I-64 at Exits 94 and 96
1029	Jackson County - FAXES Press release #1 to JIC and radio station WWAG advising citizens of Jackson County of the incident at BGAD and to stay tuned to their local radio station for further information
1030	BGAD EOC - Security verifies evacuation of Restricted Area
1030	Clark County - DES orders Public Works to stage personnel in anticipation of potential route alerting
1030	Madison County - Activates EOC
1031	Jackson County - Completes call-down of response personnel
1034	Estill County - Receives FAX confirmation from Depot of updated PAR
1036	BGAD - Last crew member processed through PDS
1037	BGAD - Patient #3 transported to main gate via BGCA ambulance pending arrival of Madison County ambulance
1037	Clark County - Boonesborough Animal Clinic is available to handle pets
1037	Madison County - Deputy Director conducts initial situation brief
1038	BGAD - OCP Commander checks stay times for PDS Personnel
1038	Estill County - Activates EOC
1038	LFUCG TCP - Activates decontamination site at Jacobson Park
1038	LFUCG TCP - Traffic direction signs set up at Jacobson Park and on I-75
1040	BGAD - Prepare RTAPs for VX monitoring
1040	Estill County - Announces route alerting for zones Estill E1 through E4
1040	Laurel County - Modifies Press Release #2 to include opening of reception center and shelter, closing of all Laurel Schools. Notifies second shift personnel to relieve EOC staff, reception center and shelter staff, and TCPs
1041	Madison County - County Judge declares a local state of emergency
1043	Garrard County - Director announces hospital decontamination is complete
1044	Madison County - PIO departs for the JIC. The Deputy PIO assumes duties in the EOC
1045	Garrard County - PIO calls Madison County to confirm which zones are affected

**Table 2. Significant Events Timeline**

<b>Time</b>	<b>Activity</b>
1045	LFUCG TCP - DEEM vehicle arrives at TCP and proceeds to decontamination site
1046	BGAD - Madison County ambulance transports Patient #3 to Patty A. Clay Hospital
1046	Jackson County - EMD conducts first staff briefing
1046	Jackson County - EOC operational
1046	LFUCG EOC - DEM Operations Officer briefs situation to EOC staff
1047	Garrard County - EOC advised that Governor declared a State of Emergency
1050	Jackson County - Notifies Red Cross to open reception center/shelter (simulated)
1050	Jackson County - Activates TCPs/ACPs (simulated) at 421 and Madison County Line, 421 and 3447 at Morrill, 421 and 2004 at Sand Gap, 421 and 3446 at Sand Gap, 421 and 290 in McKee, 3446 and 89 in Sand Springs, Rt. 30 @ Annville, Rt. 30 at Mildred Rd, and 421 and Rt. 1431 at Tyner.
1050	Jackson County - Briefs VFD on decontamination operations
1051	Estill County - All available law enforcement officers called to man TCPs. Westbound Highway 52 closed
1052	BGAD - OCP Commander informs EOC of RTAP clear readings
1052	Estill County - Notifies Powell County of evacuation of zones Estill E1 and E2
1052	Laurel County - Declares EOC operational and briefs staff
1053	Clark County - Receives State of Emergency declaration from Madison County and City of Richmond
1054	Estill County - FAXES Declarations of Emergency for Ravenna, Irvine and Estill County
1055	Clark County - Receives State of Emergency declaration from Commonwealth of Kentucky
1056	Rockcastle County - FAXES 'Stay Tuned' message to WRVK radio. Message indicates activation of EOC, provides information phone number and that no protective actions are required at this time
1057	LFUCG TCP - Three "victims" arrive at TCP, interviewed, and detained
1058	Garrard County - Madison County EOC calls back and informs PIO they did not call for shelter in place but evacuated zones 1B, 1C, 2B, 2C; No mention of 3B
1059	Jackson County - Madison County informs Jackson County that 600 students are evacuating to Jackson County Middle School
1100	BGAD - EOC Briefing
1100	BGAD - Smoke at igloo F-606 is "out"
1100	Estill County - Orders evacuation (simulated) for Marcus-Wallace Hospital
1100	BGAD - Distributes Press releases #1 and #2
1102	Laurel County - Distributes Press Release #2
1103	LFUCG TCP - Three Haz Mat vehicles arrive and proceed to decontamination site
1105	Jackson County - EMD briefs staff
1105	LFUCG TCP - Lexington Haz Mat Commander arrives at decontamination site
1105	LFUCG TCP - Three victims sent to decontamination site

<b>Table 2. Significant Events Timeline</b>	
<b>Time</b>	<b>Activity</b>
1106	LFUCG TCP - Lexington Fire Engine #2 (with a Haz Mat trained crew) arrives at decontamination site
1106	LFUCG TCP - Lexington Haz Mat #1 (rescue style truck) arrives at decontamination site with one Haz Mat Tech
1108	BGAD - No more smoke coming from igloo F-606 and the igloo is intact
1109	LFUCG TCP - Begins Decontamination area set up
1110	BGAD - Patient #3 arrives at Patty A. Clay Hospital
1110	Estill County - BGANS call to Commonwealth EOC to update on evacuations and EOC status
1111	LFUCG TCP - DEEM vehicle arrives at decontamination site
1111	LFUCG TCP - Victims arrive at decontamination site
1114	LFUCG EOC - Briefing by DEM Operations Officer
1115	Estill County - Evacuation of Estill E1 and E2 in progress
1115	Laurel County - Arranges staff for second shift or shift change
1117	BGAD EOC - Requests Augmentation team
1118	LFUCG TCP - Establishes all decontamination zones: Hot, warm and cold zones; contaminated article collection area; and medical triage/treatment areas
1120	Clark County - FAXES press release on status of activities to JIC
1120	LFUCG TCP - Decontamination site set-up complete
1120	LFUCG UK - Disassembles decontamination site
1122	LFUCG TCP - 2 Haz Mat Technicians suiting up into Level A encapsulating gear
1122	Rockcastle County - Staff briefing
1123	BGAD - Prepares to monitor the CLA with M8 paper and RTAP.
1123	Estill County - BGANS call to Clark County confirming evacuation of Estill zones E-1 and E-2
1123	LFUCG TCP - EMS treatment personnel and patient screening officer donned Level B non-encapsulating suits. (simulated)
1124	Clark County - Confirms with Estill County that zones Estill E4 and E5 not involved in evacuation
1127	LFUCG EOC - Director and DEM Operations Officer plot plume on map in EOC; briefs EOC on location of plume and igloo
1129	LFUCG EOC - 2 way radio communication difficulty between DEM Coordinator and EOC
1130	Clark County - Receives plume FAX from BGCA
1130	LFUCG EOC - CSEPP Coordinator unable to connect with server
1130	LFUCG UK - Simulated patient presented to ER nursing staff for evaluation; ER Manager correctly identifies that this mild nerve agent casualty, that had not been decontaminated or received any MARK 1 kits in the process of ambulance transport to UKMC, should receive one MARK 1 kit and then be decontaminated.
1131	LFUCG EOC - Law Enforcement Coordinator sets up an additional computer for use in EOC

**Table 2. Significant Events Timeline**

<b>Time</b>	<b>Activity</b>
1132	LFUCG EOC - DEM Operations Officer briefs status of decontamination site and evacuees
1133	Jackson County - EMD gives briefing
1133	LFUCG TCP - Haz Mat Technicians in Level A PPE on the decontamination line
1134	Garrard County - Distributes Press Release #3
1135	BGAD EOC - SRF team scheduled to depart APG at 1300 hours
1138	Clark County - Re-opens ramps at Exits 94 and 96 off I-64
1140	BGAD EOC - PBCA shipping SRF push package
1140	Laurel County - Calls made to surrounding counties requesting mutual aid for law enforcement resources for TCPs and shelter security
1140	LFUCG TCP - First victim/patient screened and starts decontamination
1142	Laurel County - EOC briefing
1142	LFUCG TCP - TCP released
1144	LFUCG TCP - Completes decontamination and treatment of first victim
1144	LFUCG TCP - Second victim/patient being screened and starts decontamination
1145	Estill County - BGANS call to BGAD to confirm FAX plume plot – did not match EMIS plume plot; Requests follow-up FAX
1147	Estill County - Assistant EMD provides situation brief to EOC staff
1148	LFUCG TCP - Completes decontamination and treatment of Victim #2
1150	BGAD EOC - Provides telephonic report of chemical event to AOC
1150	Estill County - Demonstrates shift change; 24-hour operational capability
1150	LFUCG TCP - Third victim/patient screened and starts decontamination
1152	BGAD EOC - Provides telephonic report of chemical event to AMC Safety
1154	BGAD EOC - Provides telephonic report of chemical event to SBCCOM
1154	LFUCG EOC - FAXES draft County Disaster Declaration to Area 13 Director
1154	LFUCG TCP - Completes decontamination and treatment of second victim
1155	BGAD EOC - Provides telephonic report of chemical event to OSC
1155	Estill County - Calls BGAD via BGANS for update on plume
1155	Jackson County - 24-hour shift change simulated
1155	KyEM - Governor declares a State of Emergency
1155	LFUCG UK - EOC calls the UKMC Safety Director and informs her of the incident at the depot, the name of the agent, appropriate antidote, probable symptoms, and the number of victims on the way to the UKMC ER. The Safety Director immediately calls the ER Manager and passes on this information.
1157	Jackson County - EMD briefing
1158	LFUCG TCP - Haz Mat Team self decontamination
1158	Rockcastle County - Calls Madison County to offer school buses to aid evacuation
1200	LFUCG TCP - Decontamination site breakdown and release
1202	LFUCG EOC - DEM Operations Officer posts information on closure of I-75 north from London; Re-route on Highway 80 to Summerset

**Table 2. Significant Events Timeline**

<b>Time</b>	<b>Activity</b>
1205	Laurel County - Receives notice that JIC is open
1205	LFUCG UK - TCP staff notifies UKMC that decontaminated patients are on the way to the UKMC
1206	Laurel County - FAXES press releases to JIC
1207	LFUCG EOC - Receives telephonic PAD update from Commonwealth EOC
1208	BGAD EOC - FRC is operational
1213	Jackson County - FAXES press release #2 to JIC, Radio Station WWAG, and the Jackson County Sun Newspaper
1215	JIC - Schedules press conference at 1245
1221	Jackson County - Receives FAX from BGAD that zones Estill E4 and E5 are not affected
1230	BGAD - Patient #2 released from Hospital (cast applied to broken leg); Patient #1 is alert and stable and admitted to hospital for 24 hours observation.
1230	Laurel County - Distributes Press Release #3 regarding status of evacuees
1234	BGAD - BGANS updates PAR for igloo F-606
1234	Rockcastle County - Receives ENF #4; No change for Rockcastle County
1235	BGAD EOC - IRF Commander departs for JIC and airport
1235	Jackson County - BGAD notifies Jackson County that Estill County is not affected
1242	Clark County - Receives EMIS information from BGCA providing plume associated with community emergency
1243	BGAD - Crew arrives at OCP #1 and proceeds to RTAP; Level B PPE; Prepare to challenge HPD with VX
1244	BGAD - RTAP starts monitoring for VX
1249	LFUCG EOC - Briefing by DEM Operations Officer: Estill County no longer affected.
1254	BGAD - RTAP proceeds to sample point 1 (perimeter road east of CLA at end of Row 5)
1255	BGAD EOC - EOD personnel arrives
1300	LFUCG EOC - Places Dunbar High School on standby for shelter
1300	LFUCG EOC - Notified I-75 North re-opened
1304	BGAD - Operator uses M8 paper on stick to check for liquid contamination; Negative on paper.
1310	BGAD - First VX challenge fails; Second challenge successful; Air reading taken with negative result
1314	LFUCG EOC - ENDEX as per Director
1320	BGAD EOC - SRF Commander and team departs Edgewood Arsenal
1330	Clark, Madison, Jackson, Laurel, Powell, Rockcastle Counties, Commonwealth of Kentucky - IRF/CSEPP ENDEX
1340	BGAD EOC - Finds large deer lying in the middle of a BGAD road
1345	BGAD - RTAP moves to sample point 2 (perimeter road east of CLA at end Row 6)

<b>Table 2. Significant Events Timeline</b>	
<b>Time</b>	<b>Activity</b>
1345	BGAD - IRF/CSEPP ENDEX

## LISTS OF STRENGTHS, FINDINGS, AND OBSERVATIONS

Lists of strengths, findings and observations identified during Blue Grass CSEPP EX 00 are shown in Tables 3, 4, and 5. They are grouped by the Tab in which they can be found. Findings have an assigned identifying number that may be used to identify the finding throughout the report and in completing the action plans. The number is structured as follows: XX00A09.1. The "XX" is a two-letter identification of the response organization to which the finding applied [e.g., BC for Blue Grass Community (two or more jurisdictions), BG for BGAD, KY for the State of Kentucky, MC for Madison County, LF for Lexington-Fayette Urban County Government, CK for Clark County, ES for Estill County, GR for Garrard County, JA for Jackson County, LA for Laurel County, PO for Powell County, and RO for Rockcastle County]; "00" represents the year of the exercise; "A" is the Tab designation (A, B, or C) in which the finding is reported; "09" is the objective number (01-15) to which the finding relates; and ".1" is the sequence number of the finding under the objective.

Findings from the previous exercise that were not resolved during this exercise are listed by their previously assigned identifying numbers and are carried forward with an updated number.

<b>Table 3. Tab A Listing</b>			
<b>Type</b>	<b>ID Number</b>	<b>Description</b>	<b>Page</b>
<b>Finding</b>	<b>BG00A01.1</b>	Failure To Notify Off-Post Community Within 5 Minutes	A-1
<b>Finding</b>	<b>BG00A01.2</b>	Depot Siren System Activation	A-1
Observation	BG (Obj. 2)	Monitoring Operations Concerns	A-2
Observation	BG (Obj. 2)	Lack Of Guidance For Sheltering-In-Place	A-2
Observation	BG (Obj. 2)	Inappropriate Use Of Meteorological Data	A-3
<b>Finding</b>	<b>BG00A02.1</b>	Non-Performance Of Requirements, RTAP Procedures	A-3
<b>Finding</b>	<b>BG00A02.2</b>	Incorrect Initial Par For VX Fire	A-3
<b>Finding</b>	<b>BG00A03.1</b>	Failure To Recommend Shelter-In-Place (SIP) For Madison County Zones 1B And 1C	A-4
Observation	BG (Obj. 4)	Chemical Event Reporting	A-4
Observation	BG (Obj. 4)	Notification To Army Operations Center (AOC) For Requesting The SRF	A-5

<b>Table 3. Tab A Listing</b>			
<b>Type</b>	<b>ID Number</b>	<b>Description</b>	<b>Page</b>
Observation	BG (Obj. 4)	Radio Communications Between Incident Site And Emergency Operations Center (EOC)	A-5
Observation	BG (Obj. 4)	Situation Updates For EOC Personnel Not Performed IAW LOI	A-5
Observation	BG (Obj. 4)	Dissemination Of Critical Essential Elements Of Information	A-6
Observation	BG (Obj. 4)	Separation Of Duties Between FCPO And OCP Commander	A-6
Observation	BG (Obj. 4)	Inadequacy Of Microphones Utilized For Briefings In EOC	A-6
Observation	BG (Obj. 6)	Field Radio Communications	A-7
Observation	BG (Obj. 9)	Press Release “As Of Time”	A-7
Observation	BG (Obj. 9)	Identification Of Type Of Agent	A-8
Observation	BG (Obj. 9)	Follow Up Information About Injured Depot Employees	A-8
Strength	BG (Obj. 10)	First Responder Training	A-8
Observation	BG (Obj. 10)	Use of Litter Straps	A-9
Observation	BG (Obj. 11)	Fire Department Manpower Shortage	A-9
<b>Finding</b>	<b>BG00A13.1</b>	Personnel Mask Removal At The PDS	A-10
<b>Finding</b>	<b>BG00A13.2</b>	Personal Protective Equipment For Fire Department Personnel	A-10
<b>Finding</b>	<b>BG00A13.3</b>	Gross Level Detection Tests/Checks	A-11
<b>Finding</b>	<b>BG00A13.4</b>	No Detailed Emergency Entry And Exit Procedures	A-11

**Table 4. Tab B Listing**

Type	ID Number	Description	Page
Observation	BC (Obj. 1)	Incomplete Information In Initial Notification to Off-Post	B-1
Strength	BC (Obj. 9)	Press Conference	B-2
Strength	BC (Obj..9)	Detail Of EAS Zones	B-2
Observation	BC (Obj. 9)	Press Releases	B-3
Observation	BC (Obj. 9)	Design And Appearance Of JIC	B-3
Observation	BC (Obj. 9)	Response To Media Reports	B-3

**Table 5. Tab C Listing**

Type	ID Number	Description	Page
Observation	KY (Obj. 4)	Closure Of I75	C-4
Observation	KY (Obj. 6)	Automatic Data Processing (ADP), Equipment And Training	C-5
Observation	MC (Obj. 4)	Dissemination of Information Should Be Improved	C-9
Observation	MC (Obj. 6)	Briefings Could Not Be Heard	C-10
Observation	ES (Obj. 1)	Lack Of Training And Written Procedures For Receiving And Initiating BGANS Calls	C-17
<b>Finding</b>	<b>GR00C03.1</b>	Information Was Not Recorded On The Initial Notification Form	C-22
Observation	GR (Obj. 4)	Lack of Command and Control in the EOC	C-22
Observation	GR (Obj. 6)	Entrance to the EOC Was Not Controlled	C-23
Observation	GR (Obj. 14)	Ambulance Provider Not Prepared	C-24
Observation	PO (Obj. 6)	Better Displays, Maps And Equipment In EOC	C-34
Observation	LA (Obj. 4)	Lack Of Coordination/Communication With CSEPP Jurisdictions	C-42
Observation	LA (Obj. 6)	Use of Additional EOC Equipment	C-43
Observation	LF (Obj. 6)	Lack of Communication Between Jurisdictions	C-47

**Table 5. Tab C Listing**

<b>Type</b>	<b>ID Number</b>	<b>Description</b>	<b>Page</b>
Observation	LF (Obj. 6)	Permanent EOC Needs Consideration	C-47
Strength	LF (Obj. 12)	Supplied Air-Lines	C-51
Strength	LF (Obj. 12)	Decontamination Set Up	C-51
Observation	LF (Obj. 12)	Exercise Coordination and Hospital Participation	C-51
Observation	LF (Obj. 12)	Lack Of Antidote	C-52
Observation	LF (Obj. 12)	Lack Of CSEPP Training	C-52
Observation	LF (Obj. 12)	Non-Optimal Notification Channels	C-53
Observation	LF (Obj. 12)	UKMC Access Control	C-53
Observation	LF (Obj. 12)	Use Of Diluted Clorox For Decontamination	C-53
Observation	LF (Obj. 12)	Supplied Air-Lines	C-54

**ORGANIZATION OF REPORT**

The remainder of this report is organized as follows:

- Tab A            On-Post Activities
- Tab B            Joint/Interface Matters
- Tab C            Off-Post Activities
- Appendix 1    Action Plans, By Jurisdiction
- Appendix 2    Service Response Force
- Appendix 3    Acronyms
- Appendix 4    Distribution

This Page Intentionally Left Blank.

**BLUE GRASS CSEPP EX 00  
EXERCISE REPORT**

**TAB A: ARMY ACTIVITIES**

**INTRODUCTION**

Tab A documents the specific strengths, findings, and observations noted by the evaluation team concerning the emergency response plans and procedures demonstrated by the Blue Grass Chemical Activity (BGCA) and Blue Grass Army Depot (BGAD), during the Blue Grass Chemical Stockpile Emergency Preparedness Program (CSEPP) Exercise 2000 (Blue Grass CSEPP EX 00). The evaluation team's recommendations are also provided, where appropriate.

**OBJECTIVES**

BGAD/BGCA demonstrated applicable Objectives 1 through 15 as they appear in Appendix C of the CSEPP Exercises document, dated March 19, 1999.

**Objective 1. Initial Alert and Activation**

**Finding:      BG00A01.1**

**Description:** Failure to Notify Off-Post Community Within 5 Minutes.

**Discussion:** The accident at igloo F-501 occurred at 0904. The notification call to the off-post warning points, using the Blue Grass Alert and Notification System (BGANS), was initiated at 0912 and completed at 0913. The smoke coming from igloo F-606 was reported to the EOC at 1000. The BGANS notification call was initiated at 1006.

**Reference:** Planning Guidance for the Chemical Stockpile Emergency Preparedness Program, 17 May 96, paragraph 8.4.1, page 8-13.

**Recommendation:** Streamline procedures within the EOC to ensure the five-minute reporting requirement will be met. EOC staff must be aware of all communication from security and activity workers within the Chemical Limited Area (CLA) and respond quickly to notifications of a chemical event.

**Finding:      BG00A01.2**

**Description:** Depot Siren System Activation

**Discussion:** The BGAD EOC has equipment to activate the siren system. The equipment may activate both the on-post and off-post sirens. The on-post sirens were not sounded for the accident at igloo F-501. The installation did not request Madison County to activate the

on-post sirens, nor did the installation activate the sirens. Installation employees and contractors working outside were not alerted promptly when the igloo F-501 accident occurred. The installation employees and contractors were not given timely notification of the VX fire in igloo F-606. Madison County activated sirens and tone alert radios when notified of the Community Level Emergency at igloo F-606; however, the activation did not occur until 1014, 24 minutes after discovery of the fire.

**Reference:** Memorandum of Agreement between Blue Grass Chemical Activity, Blue Grass Army Depot and Madison County, Kentucky for Outdoor Warning Device Activation during a Chemical Event, 22 May 00. Planning Guidance for the Chemical Stockpile Emergency Preparedness Program, 17 May 96.

**Recommendation:** Follow procedures in referenced MOA and train EOC personnel on system activation.

## **Objective 2.** Hazard Assessment

### **Observation**

**Description:** Monitoring Operation Concerns

**Discussion:** Real-Time Analysis Platforms (RTAPs) had only one agent type of detector in use. This caused confusion and required the use of extra RTAPs. The RTAPs and operators could have been used for additional operations. The minicams are multi-agent detectors. However, they are being used as single agent detectors. This limits the installation's emergency response capabilities and ability to complete most of its operations.

**Recommendation:** Monitoring personnel should maximize the utility of monitoring equipment. The minicams should be certified to monitor for GB/VX simultaneously. The RTAP could be set up to monitor and confirm any agent reading detected. This would save time, resources, and manpower.

### **Observation**

**Description:** Lack of Guidance for People Sheltering-In-Place

**Discussion:** The hazard analysts recognized that some people would have sheltered-in-place. However, they did not provide a protective action recommendation (PAR) for exiting the shelters and failed to identify the possible locations of people sheltered-in-place. Failure to exit a shelter in an expeditious manner increases the indoor shelter exposure to levels similar to those experienced without sheltering.

**Recommendation:** Additional training for hazard analysis personnel.

## Observation

**Description:** Inappropriate Use of Meteorological Data

**Discussion:** The meteorological data was updated every 15 minutes. However, all available meteorological data was not appropriately used to determine the time varying hazard with D2PC/EMIS. Instead of using all of the time varying data, "snap-shots" of the meteorological data were used to model both the GB spill and the VX fire. If all of the meteorological data was used with EMIS/D2PC, all affected off-post zones would have continued to have been affected by the predicted hazard wedge for the VX fire. The "snap-shot" use of the meteorological data caused incorrect PARs to be developed.

Additionally, the hazard analysts have guidance from SBCCOM outlining which meteorological tower level data (i.e., 10 meter, 30 meter, or 60 meter) should be used for various chemical accident and incident (CAI) scenarios. The guidance for modeling an igloo fire requires the use of the 60 meter wind direction data, 10 meter wind speed, and 10 meter temperature data. All 60 meter meteorology data was used in the initial assessment for the VX fire. The improper use of meteorological tower data resulted in a shorter hazard plume being generated and the failure to provide a PAR for all affected zones.

**Recommendation:** The referenced email guidance should be incorporated into the D2PC manual. The D2PC interface should be modified to easily allow for the customized use of meteorological data. Hazard analysts should receive additional training for modeling igloo fires.

**Finding:** BG00A02.1

**Description:** Non-Performance of Requirements, RTAP Procedures

**Discussion:** RTAP #352, located at Operational Control Point (OCP) 1, was not operated IAW the installation SOP. Specifically, the RTAP was not grounded; the heat trace sample lines were not plugged into a power source; and a mid-day agent challenge was not completed.

**Reference:** SOP# BT-0000-W-600, dated 25 June 2000, Operation 10d, p. 5; and Operation 10f, Page 6.

**Recommendation:** Train operators to SOP standards.

**Finding:** BG00A02.2

**Description:** Incorrect Initial PAR for VX Fire

**Discussion:** The Night Watch default igloo fire MCE of 2,535 GB filled M55 rockets projects a plume that includes Madison County zone 3B and Estill County zones E-1 and E-2. However, these zones were not included in the initial PAR for the VX fire. The hazard analysts excluded these zones by “predicting” that the 605 VX rockets in igloo F606 would not project a plume into these zones. The actual initial plume plot for the 605 VX rockets did include Madison County zone 3B and Estill County zones E-1 and E-2.

**Reference:** Reference Manual: D2PC and Hazard Analysis, 1993, Chapter 3.

**Recommendation:** Run the D2PC model with the contents of the specific magazine involved in the CAI and release the plume plot and PAR for immediate off-post notification. Release additional updated PARs when specific CAI information is known. Train hazard analysts sufficiently for analyst to be able to create model within three minutes.

### **Objective 3.** Protective Action Recommendations and Decision-Making

#### **Finding: BG00A03.1**

**Description:** Failure to Recommend Shelter-In-Place (SIP) for Madison County Zones 1B And 1C

**Discussion:** The VX fire was observed at 0950. The initial hazard plot/plume indicated that the tip arrival time to zone 1B was 1007 and to zone 1C was 1014. However, this calculation was erroneously based on a fire start time of 0957; when, in fact, smoke was observed at 0950. This resulted in potentially inaccurate, inadequate hazard plots. The initial PAR was not issued until 1007. The initial PAR indicated evacuation of zones 1B and 1C. The PAR resulted in citizens evacuating into the plume.

**Reference:** Reference Manual: D2PC and Hazard Analysis, 1993, Chapter 3.

**Recommendation:** The installation hazard analyst and Commanding Officer should consider shelter-in-place as the PAR for zones when the plume tip arrives before the evacuation could be initiated. The hazard analyst needs to be aware of, and be proactive in obtaining essential elements of information related to the hazard. The use of all essential information will enhance hazard modeling.

### **Objective 4.** Command and Control

#### **Observation**

**Description:** Chemical Event Reporting

**Discussion:** The CAI at F-501 and the igloo fire at F-606 were reported to the Army Operations Center (AOC) on the same chemical event report. Reporting two separate CAIs on one chemical event report causes confusion of activities relating to both events.

**Recommendation:** Report each chemical event separately in accordance with AR 50-6 to eliminate confusion and misinterpretation of information relating to the separate events.

### Observation

**Description:** Notification to Army Operations Center (AOC) to Request the SRF

**Discussion:** The need for SRF support was recognized in a timely manner. The actual request was made directly to the U.S. Army Soldiers Biological and Chemical Command (SBCCOM) operations center instead of the AOC. A telephonic notification/request was never made to the AOC. A hard-copy FAX request was forwarded at a later time.

**Recommendation:** Follow reporting requirements of referenced pamphlet and CAIRA plan.

### Observation

**Description:** Radio Communications Between Accident Site and Emergency Operations Center (EOC)

**Discussion:** The radio communications between the accident site and the BGAD EOC were poor at the onset of the incident. The BGCA Commander responded to the security radio notification of the accident at igloo F-501 before the EOC personnel. The BGCA Commander reported to the EOC and informed the EOC personnel of the CAI. This caused a significant delay in the EOC personnel's response to the CAI.

**Recommendation:** Maintain EOC radio volume high enough for personnel to hear and react immediately.

### Observation

**Description:** Situation Updates for EOC Personnel Not Performed IAW LOI

**Discussion:** The installation EOC's letter of instruction (LOI) requires that periodic update briefings be conducted during an event. The update briefings were conducted approximately every half-hour. These updates did not include information from each staff member. This situation resulted in key personnel not having all the information needed to properly accomplish their tasks.

**Recommendation:** The EOC Director of Operations should ensure that established procedures are followed.

## Observation

**Description:** Dissemination of Critical Essential Elements of Information

**Discussion:** Some Essential Elements of Information (EEI) were not efficiently managed within the Emergency Operations Center (EOC). Critical information relating to the accident was available from the field within 10 minutes. However, this information was not immediately conveyed to the decision-makers within the EOC. Information was provided to personnel within the EOC, but emphasis was placed on inputting that data into the EOC Journal instead of providing it immediately to the decision-makers within the EOC. Examples of EEI not being provided in a timely manner were as follows:

1. Smoke observed from igloo F606.
2. Service Response Force (SRF) teams estimated time of arrival (ETA).
3. Status of injured personnel.

**Recommendation:** Train EOC staff on the importance of providing EEI to the decision makers in a timely manner. Ensure command and control is established and maintained within the EOC as well as the delineation of responsibilities. Emphasis must be placed on the importance of disseminating clear and timely radio transmissions.

## Observation

**Description:** Separation of Duties Between FCPO and OCP Commander

**Discussion:** The Forward Command Post Officer (FCPO) typically controls all activities at the incident site/accident scene/response scene. The Operational Control Point (OCP) Commander has direct radio communication to the EOC and directs other supporting responders at the OCP. The OCP Commander is not directing information through the FCPO. The FCPO does not appear to have complete “control” of the response functions at the incident site/accident scene/response scene.

**Recommendation:** The specific duties, functions and roles should be established and rehearsed during quarterly CAIRAs.

## Observation

**Description:** Inadequacy of Microphones Utilized for Briefings in EOC

**Discussion:** The EOC has video (by displaying information from projector) and audio (by using microphone and speakers) system for conducting briefings for EOC personnel. During update briefings, the speaker could not be understood.

**Recommendation:** Re-evaluate the sound system.

**Objective 5.** Public Notification, Instructions, and Emergency Information

No Strengths, Findings, or Observations were noted

**Objective 6.** Communications Systems, Facilities, Equipment, and Displays

**Observation**

**Description:** Field Radio Communications

**Discussion:** Radio communications between security patrols were hampered due to old equipment. Several attempts to transmit situation reports from within the Chemical Limited Area (CLA) were hampered due to garbled transmissions. This problem was caused by a combination of two issues; age of equipment and procedures used by security personnel. Security personnel must understand that while wearing protective mask, personnel attempting to transmit using the radio must practice speaking slowly. Speaking slowly and clearly will increase the possibility of being heard and understood. New radios have been ordered but not yet received.

**Recommendation:** Implement use of newly purchased equipment ASAP and thoroughly train on proper radio procedures.

**Objective 7.** Protective Action Implementation for Special Populations and Facilities

No Strengths, Findings, or Observations were noted

**Objective 8.** Traffic and Access Control

No Strengths, Findings, or Observations were noted

**Objective 9.** Public Affairs

**Observation**

**Description:** Press Release “As of Time”

**Discussion:** Press releases released from the EOC did not include a date/time stamp. The time reference on press releases assists the media in knowing the sequence of events, and in tracking the sequence in which information is developed and provided.

**Recommendation:** Place “Information as of (Date)” on press releases as they are developed and approved for release.

## **Observation**

**Description:** Identification Of Type Of Agent

**Discussion:** The first press release (Press Release Number 1) identified the type of agent for the first event at igloo F-501; the second press release (Press Release Number 2) for the VX igloo fire did not state the type of agent involved.

**Recommendation:** Include type of agent in each press release.

## **Observation**

**Description:** Follow Up Information About Injured Depot Employees

**Discussion:** Initial information about the injured installation employees was provided to the Joint Information Center (JIC) in a timely manner. Follow-up information was not provided as employees’ status changed. The installation Public Affairs Officer (PAO) issued a press release approximately six hours after the CAI that failed to address issues related to BGAD employees’ health and well being. The press release included information pertaining to hazard mitigation.

**Recommendation:** Provide timely follow-up on injuries on personnel issues. Press releases should always include personnel issues to show the Army’s concern for the well being of its workforce.

## **Objective 10. Medical Services – First Response**

### **Strength**

**Description:** First Responder Training

**Discussion:** All personnel assigned to the work crew were trained in CPR, Self Aid Buddy Care (SABC) and Blood borne pathogens. First aid kits were readily available for use. CPR and SABC training are required but blood-borne pathogen training goes the extra mile for non-medical responders

## Observation

**Description:** Use of Litter Straps

**Discussion:** During medical evacuation a forklift operator with a broken leg was lifted on a litter without the straps being secured. Play was stopped and responders were told to secure straps for safety reasons. During initial transportation the straps were removed during treatment and not re-secured. While removing the casualty from the vehicle at OCP 1 play was once again stopped by the evaluator in order to secure the straps.

**Recommendation:** Litter straps must be used at all times to insure patient safety and prevent real injuries during transportation on field litters.

## Status of Previous Findings:

### ❖ Previous Finding Number: BG99A10.1

**Description:** Cardio-Pulmonary Resuscitation (CPR) Training for PDS Personnel

**Discussion:** Local requirements dictate that the Personnel Decontamination Station (PDS) crewmembers may have to administer CPR until Medical Team Personnel arrive; not all members of the PDS crew have current CPR certification.

**Reference:** SOP BG-0000-M-009, 21 July 1999, Operational Control Point Operations – Personnel Decontamination Operation 4, page 23, Step 2e. DA PAM 385-61, 31 Mar 97, Toxic Chemical Agent Safety Standards, page 25, para 7-2c(4)

**Recommendation:** Fulfill all chemical surety training requirements.

**Resolved:** Yes

## Objective 11. Medical services – Transportation

### Observation

**Description:** Fire Department Manpower Shortage

**Discussion:** Currently the fire department responds to the OCP with one engine and one ambulance. When the fire department is required to medically transport a patient, two of the four firefighters from the engine company are needed to do this function, leaving only two firefighters on the engine. Two firefighters cannot do interior firefighting, leaving the depot's restricted area unprotected. A mutual aid agreement with local firefighters provides firefighting support to the administrative and general supply storage areas of BGAD.

**Recommendation:** Either adequately staff the fire department to handle both firefighting and medical transport or remove the ambulance mission.

**Objective 12.** Medical Services – Medical Facilities

No Strengths, Findings, or Observations were noted.

**Objective 13.** Field Response

**Finding: BG00A13.1**

**Description:** Personnel Mask Removal at the PDS

**Discussion:** Personnel were processed through the PDS and masks were removed before passing to the Medical Point on the “alleged” cold side. At the time they were processed, there had been no gross level monitoring accomplished to declare the area clear. Personnel on “alleged” cold side were still required to wear their masks.

**Reference:** DA PAM 385-61, 31 Mar 1997, Toxic Chemical Agent Safety Standards, page 44, Appendix C, para C-3a

**Recommendation:** Add additional guidance to SOP on processing procedures if area has not been cleared for mask removal.

**Finding: BG00A13.2**

**Description:** Personal Protective Equipment for Fire Department Personnel

**Discussion:** The CAIRA Plan requires that the Fire Department dress in explosive handlers coveralls (with Level B TAP clothing available). The Fire Department does not carry explosive handlers coveralls or Level ‘B’ protective clothing when responding to a CAI.

**Reference:** Blue Grass Army Depot Disaster Control Plan, Annex C, CAIRA Plan, Annex D, page 31, para 3b(2).

**Recommendation:** Provide appropriate personal protective clothing to Fire Department personnel and train in appropriate use.

**Finding: BG00A13.3**

**Description:** Gross Level Detection Tests/Checks

**Discussion:** Gross level detection tests were not conducted prior to the RTAP being operational at OCP 1 (approximately 55 minutes after personnel first began processing through OCP). Enzyme detector tickets/blue band tubes were not used to conduct gross level detection test. The M8A1 Alarm placed at station #7 was not connected to its battery and was not operational for the detection of possible contamination of personnel.

**Reference:** SOP BG-0000-M-009, 21 July 1999, page 17 Operation 3, Step 3j; page 18/19, Special Requirements, Paragraph 9; Page 11 Operation 1, Special Requirements Paragraph 7a.

**Recommendation:** In the event the RTAP is not available/operational, crew at the OCP should follow SOP procedures and conduct gross level detection tests, as required. Additional training on test equipment is required.

**Status of Previous Findings:**

\* **Previous Finding Number: BG99A13.1**

**Description:** No Detailed Emergency Entry and Exit Procedures

**Discussion:** Detailed emergency entry and exit procedures had not been developed. There was not sufficient detail to explain to security force personnel how they would positively identify senior members of emergency response teams who desired entry into the chemical limited area. This lack of detailed procedures could cause a delay of personnel requiring rapid access into the CLA.

**Reference:** AR 190-59, Chemical Agent Security Program, 27 June 1994, para 7-2b(3)(e), page 13; BGAD Special Order 7, 4 Oct 99, para 4 C page 6.

**Recommendation:** Revise the emergency entry and exit procedures to be written in sufficient detail to ensure security force personnel can positively identify and verify senior members of emergency response teams and allow rapid entry and exit of the SSCC.

**Resolved:** No

**New Finding Number: BG00A13.4**

\* **Previous Finding Number: BG99A13.2**

**Description:** Loss of Accountability of Personnel

**Resolved:** Yes

**Objective 15. 24-Hour Operations**

No Strengths, Findings, or Observations were noted

**BLUE GRASS CSEPP EX 00  
EXERCISE REPORT**

**TAB B: JOINT ACTIVITIES**

**INTRODUCTION**

This Tab documents the results of the evaluation made during the Blue Grass Community Chemical Stockpile Emergency Preparedness Program (CSEPP) Exercise 2000 (Blue Grass CSEPP EX 00) relative to areas of coordination and interface between the Army and off-post jurisdictions.

**Objective 1. Initial Alert and Notification**

Due to an exercise anomaly, the EMIS system failed to project plume plots to the off-post jurisdictions. The Commonwealth of Kentucky, county jurisdictions and the BGAD EOC promptly and effectively utilized FAX and telephonic reports to monitor and disseminate plume information.

**Observation**

**Description:** Incomplete Information in Initial Notification to Off-Post

**Discussion:** On the initial notification to the off-post, the wind speed and direction were omitted. This could impede the off-post jurisdiction's ability to make prudent and timely Protective Action Decisions (PADs).

**Recommendation:** Review applicable form for completeness prior to submission to the off-post.

**Status of Previous Findings:**

\* **Previous Finding Number: BC99B01.1**

**Description:** Depot Siren System Activation

**Resolved:** Yes

### **Objective 3.** Protective Action Recommendations and Decision Making

#### **Status of Previous Findings**

\* **Previous Finding Number: BC99A03.1**

**Description:** Protective Action Recommendation (PAR) Incomplete

**Resolved:** Yes

### **Objective 6.** Communication Systems, Facilities, Equipment and Displays

No Strengths, Findings, or Observations were noted.

### **Objective 9.** Public Affairs

In general, the JIC staff performed well. The PIOs and the entire JIC staff were focused, team-oriented and committed to making the JIC a success.

#### **Strength**

**Description:** Press Conference

**Discussion:** The press conference at the JIC was well organized. All five briefers gathered with key JIC staff for a thorough pre-brief. The BGAD Public Affairs Officer (PAO) established ground rules at the beginning of the conference, and allowed flexibility for questions after each briefing. He also said that the BGAD Commander would brief first, take a few questions and then depart the conference.

#### **Strength**

**Description:** Detail of EAS Zones

**Discussion:** Clear, explicit descriptions of the seven zones designated for evacuation were included with both the Madison County EAS messages and the follow-up JIC press release. These descriptions, broken down by community/neighborhood names, evacuation routes and zone-specific maps, significantly enhanced the public's understanding of the PAD.

**Recommendation:** To strengthen this package, the evaluation team recommends adding a line at the bottom of the EAS message indicating that these detailed descriptions are attached.

## Observation

**Description:** Press Releases

**Discussion:** Press releases from the Joint Information Center (JIC) need refining. At least two releases made no reference to an incident at the depot, though the releases provided information that may have been crucial for public protection. Additionally, none of the five releases contained a time stamp.

**Recommendation:** Provide an individual to provide quality control on press releases before they are transmitted from the JIC. JIC press writers would benefit from attending an inverted pyramid writing course.

## Observation

**Description:** Design & Appearance of JIC

**Discussion:** The JIC was marginally adequate as a working press center. Being cramped (except for the media monitoring room) and not well configured in terms of information flow/coordination, this facility was less than a professional setting.

**Recommendation:** Reconfigure for efficient JIC operations.

## Observation

**Description:** Response to Media Reports

**Discussion:** The JIC media monitoring team was responsible for reviewing the accuracy of all media reports that came to them. During one report, the reporter noted that a chemical accident had occurred in Richmond, Virginia.

The media monitoring team noted this mistake and passed the information to the Madison County PIO.

The county PIO did not contact the media to correct this error. A listener/reviewer may discount the information due to the location error.

**Recommendation:** Inform the media of erroneous information at the earliest opportunity.

## Objective 15. 24 – Hour Operations

No Strengths, Findings, or Observations were noted.

This Page Intentionally Left Blank

**BLUE GRASS CSEPP EX 00  
EXERCISE REPORT**

**TAB C: OFF-POST ACTIVITIES**

**INTRODUCTION**

Tab C documents the specific strengths, findings, and observations noted by the evaluation team concerning the emergency response plans and procedures demonstrated by the Commonwealth of Kentucky and the Counties of Madison, Clark, Estill, Garrard, Jackson, Laurel, Powell, Rockcastle, and the Lexington-Fayette Urban County Government during the Blue Grass Community Chemical Stockpile Exercise Preparedness Program (CSEPP) Exercise 2000 (Blue Grass CSEPP EX 00). The evaluation team's recommendations are also provided, where appropriate.

**OBJECTIVES**

The objectives selected by the Blue Grass CSEPP EX 00 Planning Team for demonstration and evaluation by the civil jurisdictions are listed in Table 1, page 1 of this report. Definitions are contained in Appendix C of the *Chemical Stockpile Emergency Preparedness Program Exercises* document, March 19, 1999. Any exceptions to full demonstration of an objective were previously agreed to and documented in the Extent of Play Agreements.

**EVALUATIONS**

Individual evaluations may be found on the following pages:

COMMONWEALTH OF KENTUCKY .....	C-3
MADISON COUNTY.....	C-7
CLARK COUNTY .....	C-13
ESTILL COUNTY .....	C-17
GARRARD COUNTY.....	C-21
JACKSON COUNTY .....	C-27
POWELL COUNTY .....	C-31
ROCKCASTLE COUNTY .....	C-37
LAUREL COUNTY.....	C-41
LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT.....	C-45

This Page Intentionally Left Blank.

## COMMONWEALTH OF KENTUCKY

### INTRODUCTION

The Commonwealth of Kentucky demonstrated activities consistent with its plans, procedures, and the Extent of Play Agreement, including the following Objectives and Points of Review 1, 2, 4, 5, 6, and 9. The observations for specific objectives are detailed below.

#### **Objective 1. Initial Alert and Activation**

The Emergency Operations Center (EOC) demonstrated alerting and mobilizing emergency personnel in an orderly and timely manner in accordance with their organization plan, 'Duty Officer Procedure #38.' Means of notifying personnel included the Blue Grass Alert Notification System (BGANS) and commercial telephone lines. The EOC had sufficient employees to efficiently notify emergency response personnel and all counties. The Duty Officer and assisting staff alerted and mobilized personnel simultaneously.

The EOC was activated in a timely manner although new communications equipment was being installed. Several of the responding employees were experiencing and participating in the CSEPP Exercise for the first time in their emergency management career. The EOC was fully operational at 1017.

#### **Objective 2. Hazard Assessment**

The EOC successfully demonstrated this objective. Three BGANS notifications were received from the Blue Grass Army Depot (BGAD) at 0912, 1010 and 1027 with D2PC information. The Emergency Management Information System (EMIS) link did not operate due to a software anomaly. The display technician modeled the information to determine the plume and provided a plot prior to the actual transmission of the EMIS information. His proficiency at accomplishing hazard analysis enabled the EOC staff to have good projections to base their actions on.

#### **Objective 4. Command and Control**

The EOC demonstrated this objective. The Floor Manager orchestrated the EOC Operations by constantly coordinating with each individual and presiding over "all-staff" briefings. When announcing significant events, the Floor Manager consistently conveyed clear and detailed explanations of information. The "all-staff" briefings occurred at 1030, 1130 and 1240. The EOC Manager did a debriefing at the ENDEX at 1330. The Liaison Officer kept the policy makers apprised of all EOC activities. The entire staff showed great initiative in spite of working 24-hour shifts during the preceding 10 days due to an actual emergency event. The staff

coordinated all requests for resources. Whenever a staff member left the EOC, another person was delegated to take his or her place. The chain of command was always clear.

## **Observation**

**Description:** Closure of I-75

**Discussion:** The State Department of Transportation closed I-75. However, the State did not coordinate this action with the Depot or local jurisdictions. Several jurisdictions stated that they had the authority to close the interstate as required. The responsibility of the Jurisdiction once the interstate was closed was not clear.

**Recommendation:** The State should be responsible for making sure that all jurisdictions receive road closure information.

## **Objective 5. Public Notification, Instructions, and Emergency Information**

The EOC successfully demonstrated this objective. The CSEPP Public Information Officer (PIO) left for the JIC as soon as the EOC was fully staffed at 0920. The State Public Affairs Officer (PAO) remained in the EOC to tend to routine inquiries. The emergency management staff members made a conscious effort to make sure all communications were identified as being "EXERCISE." The PIO in the Joint Information Center (JIC) provided Commonwealth review of all public information releases. The Commonwealth had the capability to disseminate Emergency Alert System (EAS) messages if required to do so. However, the decision was made to disseminate information to the public via the JIC.

## **Objective 6. Communications Systems, Facilities, Equipment, and Displays**

The Duty Officer and one additional staff member promptly made notification to all appropriate response locations, organizations, and emergency personnel via commercial lines. These employees were demonstrating the capability of the organization's backup system during the CSEPP Exercise. Computerized Telephone Notification System (CTNS), which is the primary system, was inoperable. Integration of hardware and software will replace CTNS on Tuesday, October 31, 2000. This new technology will improve the capability of alerting emergency response personnel for preparing for activation of an operational facility. Automatic Paging System, facsimile, and electronic email through the EMIS were operational.

The facilities, equipment, and displays are sufficient to support emergency operations. Renovation of the Radio Console is improving space, furnishing, and technical capability in the Communication Center for the Kentucky State EOC.

## **Observation**

**Description:** Automatic Data Processing (ADP), Equipment and Training

**Discussion:** Several counties noted that the ADP equipment was only partially operational during the exercise. In addition, the personnel in these jurisdictions were not adequately trained on the CSEPP automation equipment provided by the Commonwealth.

**Recommendation:** The Commonwealth should provide better technical support to the CSEPP counties to ensure ADP systems are operational. County users need more training.

### **Objective 9. Public Affairs**

CSEPP PIO and PAO successfully demonstrated the essential functions of Objective #9. PIO departed the EOC for the JIC immediately upon activation of this facility. PAO was proactive in communicating with the JIC and in coordinating the release of accurate and timely information. He properly responded to public inquiries. His ability to promptly prevent dissemination of conflicting, inaccurate or misleading information and to protect the public health and safety was effective. The Operations Chief was able to answer all media inquiries during an interview with Channel 11. He delivered clear and consistent information to the public.

This Page Intentionally Left Blank.

## MADISON COUNTY

### INTRODUCTION

Madison County demonstrated, consistent with its applicable plans, procedures, and the Extent of Play Agreement, the following Objectives and Points of Review: 1, 2, 3, 4, 5, 6, 7, 8, 9, 12, and 15. The observations for specific objectives are detailed below.

#### **Objective 1. Initial Alert and Activation**

The EOC was successfully activated and county responders were mobilized in response to the chemical accident. The BGAD daily work plan was FAXED to the EOC at 0707. An initial “heads-up” call of a Post Only Event was received in the EOC and in the Dispatch Office at 0912. No wind direction or speed was given during this notification. The EOC was partially activated at this time. This process was smooth and followed the Madison County Emergency Operations Plan (EOP).

The subsequent community event notification via BGANS was received in the Madison County EOC at 1012. The information exchange with BGAD was clear and contained all the information required for the county to take the needed emergency actions. Full EOC activation was directed and completed by 1030. A copy of the chemical notification form was FAXED from BGAD to Madison County EOC at 1012 verifying the verbal notification.

The county was not able to receive updates via EMIS due to some software anomaly until the very end of the exercise. Due to this problem the Emergency Management Director (EMD) used the verbal BGAD Protective Action Recommendations (PARs) as the Protective Action Decisions (PADs) and activated the Tone Alert Radios (TARs) and the Emergency Activation System (EAS) for evacuation of Zones 1B, 1C, 2B, and 2C at 1012. The alert procedures were completed immediately.

#### **Objective 2. Hazard Assessment**

At 0707, a daily operations work plan was received at the EOC. The work plan was sent via EMIS and a FAX in accordance with the Madison County EOP. The work plan D2PC plume was run and displayed on the projector screen in the EOC.

At 0912 Madison County received a Post Only Emergency notification from BGAD which required the county to take no emergency actions. However, the BGAD failed to give wind direction and speed. Additionally, the EMIS plume information did not flow from the BGAD to Madison County due to software problems. The county used information from other means to develop D2PC plumes for display.

At 1012 Madison County received a Community Emergency notification from BGAD that a VX accident had occurred at the BGAD with a PAR to evacuate Zones 1B, 1C, 2B and 2C was given. The county went with the depot's recommendation.

### **Objective 3. Protective Action Recommendations and Decision-Making**

Madison County successfully demonstrated the ability to make timely and appropriate PAD in accordance with the Madison County EOP. At 0912, a "heads up" BGANS call was received from BGAD of a Post Only Emergency and subsequently the Madison County EMD began partial activation of the EOC.

Between 0912 and 0930, the Madison County Judge and several county and Richmond City staff members arrived at the EOC. The Judge and members of the partially activated EOC were quickly briefed by the EMD on the emergency.

At 1006, BGAD notified Madison County via BGANS that another event had occurred and reported a Community Emergency with a PAR to evacuate four zones (1B, 1C, 2B, and 2C). Since EMIS was still not operational, the EMD made the decision to accept the PAR as their PAD and emergency actions were so directed.

Approximately 30 BGANS coordination calls between the BGAD Liaison Officer to the Madison County EOC and BGAD EOC occurred between the initial notification at 0912 and ENDEX at 1330. Those calls passed significant amounts of timely and useful information which was subsequently used to inform the public, responders and media through the indoor and outdoor warning systems, the Emergency Alert System (EAS), press releases, telephone and radio.

### **Objective 4. Command and Control**

The Madison County EOC Director, staff and agency representatives performed their duties in a professional and thorough manner. With the assistance of some well-developed implementing procedures and reference materials, they were able to take their positions and execute their duties. A PAD was made within eight minutes, with appropriate notifications initiated in a timely manner. The BGAD liaison often answered BGANS allowing the EOC Director and staff to interact very well with the agency representatives, fielding and responding to questions. There did not, however, appear to be much interagency or inter-jurisdiction coordination. The EOC Director gave several briefings and the agency representatives were asked to provide information at the last briefing. The agencies could be asked to brief earlier to stimulate more information flow and interagency coordination.

The Madison County Director in coordination with the County Judge issued an emergency declaration at 1041 and also effectively utilized a Memorandum of Understanding (MOU) with Calhoun County, Alabama to support them with EOC staff.

## Observation

**Description:** Dissemination of Information Should Be Improved

**Discussion:** Dissemination of information within the EOC and to other appropriate agencies and jurisdictions to allow for the coordination of field response activities and requests for information is mandatory. Madison County made improvements in their efforts to accomplish this by utilizing two part message forms and using an electronic board for an event log. But more should have been done with the event log. The events log did not contain important information to include critical elements of information, information on simulated traffic control points (TCPs) or access control points (ACPs), follow up information on the injured, the disposition of the special needs populations who were evacuated, requests for reception centers or shelters, and their activation location, either simulated or demonstrated.

**Recommendation:** An event log can be invaluable if used properly. Include BGAD and all participating jurisdictions on the distribution list. Madison County should utilize a computer with a “running” event log displayed on the wall so that more information can be added in the correct time sequence whenever the Event Log Coordinator receives information.

### Objective 5. Public Notification, Instructions, And Emergency Information

The Madison County EOC received the initial alert and notification of a BGAD Post Only incident at 0912. The EMD partially activated the EOC. At 1006 when the classification changed to “Community Emergency” due to another incident, most of the EOC staff was already in place. The EMD activated the TARs, sirens and EAS at 1012. The communications manager began public notification procedures immediately. The TARs were activated, one of which sounded in the EOC for demonstration, and computers electronically activated the 31 sirens. A printout was available that showed two sirens in Madison County with partial failure and all others worked properly. The sirens were re-activated every 12 minutes.

The PAO used the radio override capability and broadcast FAX to issue the EAS message. The County Fire Coordinator was present in the EOC. He directed the Fire Departments in Madison County by telephone and radio to begin simulated route alerting. The route alerting was completed within 30 minutes.

The sirens, TARs and EAS were activated in a timely manner and in accordance with the EOPs.

### Objective 6. Communications Systems, Facilities, Equipment, and Displays

The Madison County Emergency Management Agency was located on the first floor of a building that conveniently houses both the Richmond Fire Department and the County's 911 communications Dispatch Center. The facility was adequate for emergency operations and the Madison Emergency Management Staff designed the EOC in such a way that enhanced emergency operations.

The EOC had two computer workstations located at one corner of the EOC that gave them the ability to assess the chemical event hazard. It would have helped if the emergency zones could be displayed on the EMIS display. The EOC had additional-support function positions equipped with telephones, video projection systems for displaying status boards and plume projections, and dedicated circuit lines for phones and radios. The space in the operations room was limited but utilized effectively. Another room outside of the EOC housed a copier and dedicated outgoing FAX machine. The dedicated incoming FAX was situated in the 911 center. The BGANS and Red phone hotlines were located near the entrance to the operations room. Each agency/department coordinator assigned to the EOC had a telephone, appropriate plans/SOPs, and supplies. This provided direct and timely contact with field responders that eliminated potential communication gaps.

Adjacent to the operations room was the County's 911 communications dispatch center. This area was equipped with a wrap-around console on the perimeter of two walls in the room. The console contained all of the communications equipment and computer control systems for the alert and notification systems. The county's 31 sirens and 13,000 TARs were controlled from this room.

Madison County had an emergency Uninterruptable Power Supply (UPS) that provided continuous power to the EOC equipment in the event of a power loss.

Various zone maps and special population information were noticed on several of the walls. These displays were readable. There was also a television set in the operations room for the staff to view media releases regarding an emergency event.

Across the hall from the communications room was a kitchen and break-room. Bathrooms were located across the hall from the operations room. There was a large conference room upstairs that could be used for media conferences, briefing and debriefing sessions and training. This room would also be used as a Federal Response Center if the event reached a certain level of response.

Madison County officials utilized their limited space efficiently. The emergency operation seemed to flow without any interference or major problems.

## **Observation**

**Description:** Briefings Could Not Be Heard

**Discussion:** The EOC briefings were difficult to hear/understand due to the activity level and high background noise in the EOC.

**Recommendation:** An EOC speaker system should be installed that will allow the EOC staff to hear the briefings.

**Objective 7. Protective Action Implementation for Special Populations and Facilities**

The school buses used in the exercise were pre-positioned in the area adjacent to Waco Elementary School. At 1013 an EAS test notification alert was announced on the emergency radio. The principal gathered the non-instructional personnel in the office to review their assignments in case it was an incident other than one calling for evacuation. The staff gathered the student information cards and the nurse’s medical information together, and completed the final student roster for the day.

**Objective 8. Traffic and Access Control**

The Richmond City Police, Madison County Sheriff’s Department and Kentucky State Police simulated traffic and access control points in Madison County. All agencies arrived at the EOC within minutes of being notified.

The expertise of these individuals was evident as they assessed the situation and used the resource notebooks made available at their workstations. The notebooks held their Standard Operating Procedures (SOP); county maps marked with the location of Traffic Control and Access Control points by zone and other information needed to set them up. The following TCPs and ACPs were established:

<u>Zone</u>	<u>TCP</u>	<u>ACP</u>
1B	7	3
1C	7	4
2B	3	3
2C	5	5

At 1029 a PAR was issued by the BGAD to evacuate Zone 3B, E1, and E2. Four (4) TCPs and six (6) ACPs for this zone were simulated. As an exception, the County Judge made the decision not to shut down I-75.

**Objective 9. Public Affairs**

At 0912 the EOC Staff was notified through the BGANS that a chemical agent incident occurred at the BGAD. The event was classified as Post Only. At 1006 BGAD notified them that a second chemical incident had occurred (VX igloo fire). This community level event included a PAR to

evacuate Zones 1B, 1C, 2 B and 2C. At 1012 the EMD issued an EAS message and sounded the TARs and sirens.

The PIO demonstrated the radio override capability and issued a sample EAS message. The EAS message was also issued by broadcast FAX. This was done according to the Emergency Operations Plan and in a timely manner.

The Madison County PIO left for the JIC at 1044.

**Objective 12. Medical Services – Medical Facilities.**

Berea Hospital was not notified of any problems at BGAD or of any potential transport of patients. A friend of one of the ER nurses called to let her know that ambulances were en route with two casualties. After 2 hours, no patients had arrived. Therefore, a walk through of the tracking system was conducted in case patients arrived from the BGAD. Emergency Room personnel could not locate triage cards which is problematic if mass casualties arrive without previously being triaged. Otherwise, the admitting and tracking procedures were well done, with identified personnel available and knowledgeable about tracking, PR and notification procedures.

**Objective 15. 24-Hour Operations**

Emergency response activities for a chemical event may require organizations to provide replacement personnel to staff all essential response positions on a continuous 24-hour basis for a period of time. Madison County demonstrated the ability to conduct two shift changes, as was discussed during the site visit prior to the exercise and as agreed to in their extent of play agreement.

## **INTRODUCTION**

Clark County demonstrated, in accordance with its Extent of Play Agreement, Objectives and Points of Review 1, 2, 3, 4, 5, 6, 8, and 9.

### **Objective 1. Initial Alert and Activation**

At 0911, the Clark County EOC received initial notification via the BGANS, indicating a Post Only chemical event transpiring at BGAD. At 0913 the Clark County Director of Emergency Services (DES) instructed individuals in the 911 center to initiate a manual “call-down” of EOC staff members. This action was concurrent with the decision to activate the Clark County EOC. The call down was completed at 0922. The Clark County DES Director gave an initial update briefing at 0935. The Clark County EOC was declared operational at 0945.

The Clark County EOC staff members proceeded to make preparations to mobilize emergency response personnel and resources, as well as, establishing staging areas and mobile decontamination units. The EOC staff was able to follow the directives and guidelines delineated in the county EOP.

### **Objective 2. Hazard Assessment**

The Clark County EOC relies on the EMIS as the primary means of providing chemical event hazard assessment information. EMIS was unable to disseminate hazard projections to the jurisdictions due to an exercise anomaly. The Clark County EOC received periodic FAX updates to plume data, wind direction, as well as PARs. The county also received a vast amount of information via email. This information was briefed to EOC staff members as it became available, which afforded them the opportunity to respond and make decisions consistent with unfolding events.

### **Objective 3. Protective Action Recommendations and Decision-Making**

Based on PARs received from BGAD, which initially consisted of evacuation zones, Clark County took steps to accommodate evacuees from those zones entering Clark County as it became necessary. Additionally Clark County prepared the schools for evacuation in the event it might also be required to evacuate students and faculty. The Clark County EOC accepted and responded to all PARs provided by the BGAD.

### **Objective 4. Command and Control**

The Clark County DES was able to successfully control and manage activities associated with the event. The Clark County DES demonstrated confidence, skill, and enthusiasm throughout the course of the exercise. Periodic training sessions for EOC staff serve as evidence of the initiative and dedication to making their operation as effective and efficient as possible.

During the course of the exercise, EOC staff members routinely coordinated with one another, providing each other with valuable and pertinent feedback. They were well versed in the task-at-hand, and were more than willing to go the extra mile to achieve results. Additionally there were several job aids available to EOC staff members that enabled them to answer a wide variety of questions if asked.

The scope of this event never exceeded the capabilities and resources of Clark County. Consequently, there was no need to request supplementary assistance.

#### **Objective 5. Public Notification, Instructions, and Emergency Information**

Following receipt of each of three BGANS notifications, Clark County staff quickly determined that their residents were not in danger. As a result, the County did not require use of EAS to notify their citizens and responded in accordance with their plan. Nevertheless, the County Roads representative at the EOC simulated staging of personnel in the event that route alerting became necessary. The PIO gathered relevant information and then simulated the distribution of a press release by FAXING a County-specific description of activities to the JIC.

#### **Objective 6. Communications Systems, Facilities, Equipment, and Displays**

For both the Post Only and Community Emergency events, the Clark County EOC quickly received official notification via the BGANS. Subsequently, the dispatch center initiated and completed a manual call-down of key EOC personnel in a timely manner. The county used email to send and receive event boards throughout the exercise along with other pieces of information. Other available means of communication (i.e., internal and external telephone systems, cellular phones, EMIS, FAX, and Radio Amateur Civil Emergency Service (RACES)/Amateur Radio Emergency Services (ARES) also were successfully demonstrated. Notably, in many cases (e.g., coordination with local schools), telephone communication was initiated with external entities directly, rather than being simulated.

Although somewhat antiquated, the communications equipment was successfully operated and maintained by the EOC staff. In combination with regular briefings, this ensured a consistent flow of timely information to EOC staff throughout the exercise. In two instances, equipment problems with printers and FAX machines were corrected quickly and without producing further difficulties.

Other facilities, equipment, and displays within the Clark County EOC (e.g., lighting, space, furniture, and kitchen) also were sufficient to support ongoing operations (although not all EOC personnel were assigned phones). County and regional maps were displayed in several locations

and briefing books containing key information were available at each location. An electronic status board, updated quickly and regularly, was clearly projected on the wall, keeping EOC personnel abreast of developments in the exercise and allowing staff briefings to focus on the latest developments. EOC staff knew their CSEPP responsibilities and performed their duties in a very professional and efficient manner.

#### **Objective 8. Traffic and Access Control**

Traffic and access control was simulated due to personnel shortages. However, there was a TCP set up at the entrance to the hospital but was not coordinated with the evaluator in advance in order to be evaluated.

Following receipt of the notification of a community emergency, simulated TCP/ACPs were identified and “activated” in a timely manner in accordance with Clark County emergency procedures. Further, to limit the number of citizens downwind of the plume (which initially was headed toward Clark County), the County Roads representative simulated instructing road crews to block the off-ramps at two exits from I-64 leading directly to the City of Winchester. A third exit providing access to Winchester (familiar only to local residents) was to be left open. Once the plume direction shifted to a more easterly direction, the ramps were re-opened.

#### **Objective 9. Public Affairs**

The dissemination of emergency public information directly to the media was not demonstrated, and no staff members were dispatched to the JIC. The PIO gathered information from EOC staff and prepared a press release following notification of the community emergency; the press release was then FAXED to the JIC. Due to the need for the PIO to be at his station in the EOC to respond to ongoing public inquiries, the press release was in bullet format and somewhat hastily handwritten.

Public inquiries were effectively demonstrated. Numerous citizen inquiries were addressed by the PIO (or, when occupied by another inquiry, the DES Director) throughout the exercise. Both individuals responded to these inquiries in a helpful and efficient manner, providing clear and up-to-date information to callers.

#### **Objective 12. Medical Services – Medical Facilities**

This item was not evaluated. However, the Clark Regional Medical Center did participate in the exercise and was observed. Overall, the hospital and medical staff performed very well. At the start of the exercise, the TCPs were set up promptly and the personnel clearly demonstrated their ability to effectively screen incoming patients for possible exposure. The medical staff demonstrated their ability to quickly set up the portable decontamination shower and to establish and control the flow of “victims” through decontamination and to the emergency room. PPE was donned quickly with no problems. Incoming victims were processed immediately and

appropriately. Decontaminated victims were processed in a very efficient manner and the triage decisions clearly demonstrated a thorough knowledge of nerve agent signs and symptoms. However, there needs to be a better division between the clean and dirty sides of the decontamination line. The physician doing the triage should not have to walk or move the patient to the emergency room. He needs to stay with the bulk of the patients leaving the decontamination line.

## **ESTILL COUNTY**

### **INTRODUCTION**

Estill County demonstrated in accordance with its Extent of Play Agreement, Objectives and Points of Review 1, 2, 3, 4, 5, 6, 9, 12, and 15. The observations for specific objectives are detailed below.

### **Objective 1. Initial Alert and Activation**

Initial notification of the event was received via BGANS at 0912 by the Estill County Dispatch Office of a Post Only event at BGAD that occurred at 0904. During roll call, Madison County asked for a plume plot and pointed out that no wind speed or direction had been given and requested this information. This call was completed at 0913. The EMD learned of this incident at 0912 by listening to the BGANS in his office; however, the dispatch office would normally notify him. The dispatcher notified the EMD at 0924. This delay was caused by the receipt of an actual 911 call that arrived at the completion of the BGANS notification.

At 1006 the Estill County dispatcher received a second BGANS call from the BGAD. The BGAD caller stated that a second incident happened at 0957 and involving an igloo fire. The igloo contained VX rockets. This incident was considered a Community Level Event. A PAR was given at this time for evacuation of Zones 1B, 1C, 2B and 2C. The Estill County dispatcher then notified the EMD of this update at 1010. Upon contacting the EMD, the dispatcher was instructed to page out all emergency personnel with notification that the EOC had been activated due to CSEPP emergency and to report to their duty stations. She began this operation at 1014 and completed it at 1016.

The EMD declared the Estill County EOC officially activated and operational at 1038. At 1106 a FAX was sent by the EMD to the Area 13 Coordinator containing this information.

### **Observation**

**Description:** Lack of Training and Written Procedures for Receiving and Initiating BGANS Calls

**Discussion:** The dispatcher and an EOC staff member were experiencing their first CSEPP exercise. These personnel weren't familiar enough with the notification form that is used to record information disseminated via the BGANS. This is a very lengthy form that many did not use. Instead they opted to write the information relayed on sheets of ordinary paper.

Personnel, especially the dispatcher, were unfamiliar with the BGANS equipment itself and its proper use in initiating and receiving calls.

**Recommendation:** Ongoing training for new personnel should be initiated for both the notification form and BGANS equipment. Further recommend that a written instruction sheet for use of BGANS be developed and placed near each unit.

## **Objective 2. Hazard Assessment**

This objective was demonstrated satisfactorily by the Estill County EOC.

A PAR was given for evacuation of Zones 1B, 1C, 2B and 2C. At 1026 a second PAR was received via BGANS at the Estill County EOC advising of revised PAR for evacuation of Zones 1B, 1C, 2B, 2C, 3B, and Estill E1 and E2.

## **Objective 3. Protective Action Recommendations and Decision-Making**

Estill County satisfactorily demonstrated this objective.

At 1006 the Estill County Dispatch Office received notification of a second event via BGANS; the event was a Community Emergency. This event was reported to have happened at 0957 and involved a fire in an igloo storing VX rockets. A PAR was issued for evacuation of Zones 1B, 1C, 2B, and 2C.

A second PAR was received on BGANS at 1026. The PAR issued at this time was for evacuation of Zones 1B, 1C, 2B, 2C, 3B and Estill E1 and E2. At 1030 the EMD began coordination of the evacuation of E1 and E2.

At 1034 the Assistant EMD received a FAX confirmation of the 1026 BGANS notification of the second PAR. This FAX did not transmit clearly and there was doubt about what Estill County Zones to evacuate. The Assistant EMD called the BGAD on BGANS and confirmed the PAR for evacuation of Zones E1 and E2. He then briefed the EOC on this PAR.

At 1052 the EMD notified Powell County that Zones E1 and E2 were being evacuated.

At 1145 the Assistant EMD contacted BGAD via BGANS to discuss a FAX that had been received of a plume plot. This plume plot did not match the plume that was generated by EMIS and projected on the EOC screen. Assistant EMD requested a corrected FAX. BGAD stated that it would re-send the FAX, but FAXES were not going through quickly as the FAX was backed up.

## **Objective 4. Command and Control**

Estill County satisfactorily demonstrated this objective.

Real world events forced unplanned EOC management substitutions. Three different EOC managers directed operations. The dispatch center received a real world 911 call involving an accident, which slowed their notification to the EMD of the initial Post Only event.

At 1054 the EMD FAXED out signed Declarations of Emergency for the cities of Ravenna, Irvine and Estill County.

At 1121 the EMD left the EOC for real world departmental business. He transferred EOC management to the Assistant EMD. At 1147 the Assistant EMD provided a situation brief to the EOC staff.

#### **Objective 5.** Public Notification, Instructions, and Emergency Information

Estill County simulated this objective. Estill County has no warning devices such as sirens to alert the public. EAS messages were issued by the PIO and Zones E1 and E2 were evacuated. Route alerting was initiated for Zones E1 through E4. Evacuation was also ordered for Marcus-Wallace Hospital.

An EAS message was released to for broadcast at 1038 (simulated). No method was demonstrated to monitor and document EAS broadcasts.

At 1110 the EMD contacted the State EOC on BGANS to update on evacuations and EOC status. He also reported to the EOC staff at 1115 that evacuation of Zones E1 and E2 was in progress.

At 1123 the EMD called to Clark County EMD via BGANS confirming evacuation of Estill Zones to Clark County. At 1234 the BGAD was updated in the same manner regarding evacuations. At 1247 a BGANS call was received from the BGAD during which the BGAD requested and received information on Estill County sheltering and evacuation.

#### **Objective 6.** Communications Systems, Facilities, Equipment, and Displays.

Estill County satisfactorily demonstrated this objective.

Estill County was able to adequately communicate with all entities necessary via telephone, FAX, email, various radio systems, including 800 MHz and the BGANS system.

Display systems including a projection system to show plume information were present and adequately utilized. Display system enhancements will be incorporated in the new EOC facility currently under construction. The new EOC will house both the EOC and dispatch Center (completion due in FY2001) which will improve the coordination between both entities.

#### **Objective 9.** Public Affairs

Estill County demonstrated this objective in a satisfactory manner. A PIO was designated and in place at the EOC until part way through the exercise when he was forced by real world business to leave the EOC. A new PIO was designated who also performed adequately. The PIOs

demonstrated the ability to develop, coordinate and disseminate pertinent information to the public and the media. The PIO provided several EAS messages and answered mock media calls at the EOC.

The Emergency Management Agency (EMA) Director also provided an interview with mock media after the end of the exercise.

**Objective 12. Medical Services, Medical Facilities**

The medical objective was not demonstrated. Personal Protective Equipment (PPE) did not arrive in time to be utilized during the exercise.

**Objective 15. 24-Hour Operations**

At 1150 an EOC staff briefing was conducted by the EMD and a shift change was demonstrated.

The 24-hour operations objective demonstration was hampered by real world events. EOC staffing was severely reduced, preventing a functional demonstration of a shift change. However, the EOC CSEPP staff is primarily law enforcement, fire, emergency medical or others who normally work a 24-hour schedule. Rosters are available to support 24-hour operation.

## **GARRARD COUNTY**

### **INTRODUCTION**

Garrard County demonstrated, in accordance with its Extent of Play Agreement, Objectives and Points of Review 1, 2, 3, 4, 5, 6, 8, 9, and 14. The observations for specific objectives are detailed below.

#### **Objective 1. Initial Alert and Activation**

The Garrard County Dispatch was notified of the chemical incident at BGAD at 0912 via the BGANS. FAX confirmation was received at 0948. The Dispatch staff immediately contacted the EMD who tasked dispatchers to contact the fire and sheriff's departments to begin the automated staff call down. The fire and sheriff's departments were contacted via radio at 0913. The automated staff call down began at 0917 and ended at 0919. The EOC was activated with the EMD and the State liaison being the only staff members present when the initial notification was received. Staff members began arriving at 0915 and the EOC was fully manned at 0940. As staff members began arriving in the council chamber, they began to place customized emergency operating procedures at each pre-assigned staff position and quickly transformed the council chamber into an operational EOC. Although the EOC was never officially declared operational, the staff members began assuming tasks and handling phone calls as they reported to duty.

#### **Objective 2. Hazard Assessment.**

The Garrard County EOC attempted unsuccessfully to obtain accurate and updated plume information from D2PC throughout the exercise due to a software anomaly. However, for reasons yet to be determined, the information displayed on D2PC software differed considerably from information furnished via the BGANS and FAX communications. Repeated attempts by the computer operator and the computer specialist to update plume information were unsuccessful. It was apparent that the computer operator was proficient in operating the EMIS system and continually provided the EOC with email and status board updates. EOC staff displayed the initial notification form on an overhead projector and updated the form as the plume progressed. Areas expected to be affected by the plume were highlighted on the form and then verified on a CSEPP community map located on the wall. Even with the D2PC problem the EMD was able to assess the hazard and correctly determine Garrard County would not be affected by the incident. Better communication with other jurisdictions and more utilization of EMIS would enhance the ability of the county to share information with other jurisdictions.

#### **Objective 3. Protective Action Recommendations and Decision-Making**

Garrard County Dispatch received notification of a BGAD Post Only incident at 0912 via the

BGANS. Dispatch's failure to execute the notification form caused a considerable delay in determining what protective actions were necessary. The EOC was activated and responders were contacted and informed to report to the EOC. This was done as a precautionary measure. Once the EOC was staffed and the incident information reviewed, a call was placed to the Judge at 0950 and he was informed of the Post Only Incident and that residents of Garrard County were at that time in no danger. Shortly thereafter a second event (VX igloo fire) was reported as a Community Emergency; residents of Garrard County were still in no danger and the PAD remained in effect. The EMD and EOC staff monitored conditions as they changed and were prepared to issue a revised PAD had the need arisen. It should be noted that the delay caused by not recording information on the notification form would have delayed a critical PAD and caused serious consequences if Garrard County had been affected by the incident.

### **Finding GR00C03.1**

**Description:** Information Was Not Recorded on the Initial Notification Form

**Discussion:** Upon receipt of the BGANS initial notification call, the dispatcher notified the EMD of the incident at BGAD. However, she did not record this information on the incident notification form. This caused the EMD a considerable delay in determining how his county would be affected.

**Reference:** Garrard County Implementing Procedure; 911 Dispatch (Warning Point); Item #1, Page: Community – 1; June 2000.

**Recommendation:** This problem is clearly a training issue easily rectifiable if the dispatcher is provided training to become familiar with what information is on the form and the importance of recording it accurately.

### **Objective 4. Command and Control**

Although each of the responders reporting to the EOC was knowledgeable of the distribution of responsibilities, a clear demonstration of command and control was not evident. The EMD was active in determining and tracking ongoing activities but he did not keep other staff members abreast of ongoing events in Garrard and/or other jurisdictions. Regularly scheduled staff briefings would improve everyone's understanding of what actions have been taken and those that need to be taken. It would also provide responders an opportunity to assist other EOC response agencies during critical times.

### **Observation**

**Description:** Lack of Command and Control in the EOC

**Discussion:** The EMD and his staff were knowledgeable of their responsibilities but command and control in the EOC were weak.

**Recommendation:** The EMD should conduct regular staff briefings to keep his staff and other jurisdictions informed of current events.

**Objective 5.** Public Notification, Instructions, and Emergency Information

An Officer from the Cartersville Volunteer Fire Department simulated the Route Alerting system currently in use via a detailed discussion. The Fire Department utilizing both Fire Department Equipment and personally owned vehicles (POVs) would run the 8 different routes which can be manned by a minimum of 4 to 8 firefighters. Each firefighter has a copy of the fire department SOPs that contains a copy of the routes and the route alert message as well as a 3x5 laminated card with the route alert message. All of the routes start and end at the fire station where the route alert personnel would meet and then proceed on the routes. The fire department practices route alerting on a quarterly basis.

**Objective 6.** Communications Systems, Facilities, Equipment, and Displays

During emergency conditions, Garrard County utilized the Lancaster City Council Chambers as the EOC. The EOC is located next to the 911 center and adjacent to the EMD's office. The chamber is pre-wired for the addition of four emergency telephones and power. An EMIS workstation and printer have been pre-positioned in the room. During activation and setup of the EOC, telephones, tracking charts and maps were installed in pre-identified positions. A LCD projector was utilized to alternately display current plume plot and major events log. In the EMD's office there are pre-installed 2-meter amateur radios that act as a backup to the municipal communication system. Back-up equipment was not demonstrated during the exercise. Individual record logs were kept. The county satisfactorily demonstrated their ability to best utilize resources and the ability to meet community needs.

**Observation**

**Description:** Entrance To the EOC Was Not Controlled.

**Discussion:** The entrance to the EOC was not controlled and on two occasions people looking for directions entered the EOC.

**Recommendation:** Security should be provided at the entrance to the EOC.

**Objective 8.** Traffic and Access Control.

A Lancaster City Police Officer established the TCP at the intersection of Hwy 52 and 1295. He understood and demonstrated all components of the TCP objective and was aware of what had happened at the BGAD. He directed traffic away from the BGAD and looked for signs and symptoms of exposure.

## **Objective 9.** Public Affairs

At 1035, the County PIO developed and sent an initial press release to the JIC. Follow up press releases were sent at 1049 and 1149. The PIO effectively handled the incoming calls with accurate and timely information and directed specific calls not associated with public information to the appropriated department. As events unfolded the PIO established a dialogue with Madison County's PIO to insure the accuracy of his press releases. A real world telephone interview was conducted with the local newspaper during the event. All messages were coordinated with the EMD before they were released.

## **Objective 14:** Screening, Decontamination, Registration, and Congregate Care of Evacuees

One person arriving at the Hwy 52 and 1295 intersection TCP was detected as having possibly been exposed to the chemical agent and was directed to a parking lot where this person was picked up by the Garrard County Ambulance Service. The Garrard County Ambulance Service was not prepared to handle this or any situation regarding a chemically contaminated victim. They utilized their standard transport protocol while transporting the person to the Garrard County Memorial Hospital where the Lancaster Fire Department had set up their portable Decontamination Station. The fire department assisted the Hospital staff in decontaminating this person. The hospital provided four individuals to handle the decontamination operation. These individuals were the Infection Control Officer, Respiratory Therapist, Director of Nurses, and the ER Coordinator. They decontaminated the person and then moved him into the ER. In the ER they scanned the individual for contamination and monitored as needed.

The Reception Center was not demonstrated during this exercise as the Red Cross representative who would set up and manage the center did not participate due to medical reasons. The Red Cross should provide an alternate means of staffing a reception center. This should include an alternate person who could staff this position on an extended basis if needed.

## **Observation**

**Description:** Ambulance Provider Not Prepared

**Discussion:** Transportation and decontamination of the evacuee was demonstrated out of sequence with exercise play. The ambulance crew was not prepared to handle the contaminated evacuee. They did not know or understand their established protocols for this procedure. One crewmember stated that he knew the protocols but could not tell the evaluator what they were. The other stated that he had not read the protocols. They should be sufficiently knowledgeable of and rehearsed on their own contaminated victim protocols. They were also unfamiliar with the equipment provided to them to perform this task.

**Recommendation:** Since some of the employees have not taken the previously conducted mandatory training, ambulance system managers should take a serious look at assuring their employees are provided with adequate training. Management is responsible for making sure their employees are not exposed to anything that could adversely affect their health.

This Page Intentionally Left Blank.

**JACKSON COUNTY**

## **INTRODUCTION**

Jackson County demonstrated, in accordance with its Extent of Play Agreement, Objectives and Points of Review 1, 2, 4, 5, 6, 9, and 15.

### **Objective 1. Initial Alert and Activation.**

The Jackson County Department of Emergency Management received notification of a Post Only Event from BGAD via the BGANS at 0912. At 1006 Jackson County received notification of a Community Level Event via the BGANS. The Jackson County 911 Dispatcher, located in the EOC, initiated their manual call-down procedures to their response personnel at 1012. These included the following: County Judge, County EMD, PIO, Law Enforcement, Fire Services, Mass Care, EMS, Transportation, RACES, Jackson County Health Department, KY EM Area Manager, and communications/support staff. The EOC was activated at 1013 and the call-down was completed at 1031. Once the EOC was staffed to appropriate manning level, the EOC was declared operational at 1046.

In accordance with the Jackson County Plan, a Policy Group was activated which consisted of the County Judge, the Mayor of McKee, and the EMD.

### **Objective 2. Hazard Assessment.**

The Jackson County EOC received D2PC information on a Post Only event from BGAD via the EMIS at 0916. At 1006, the county received notification of a second chemical event from BGAD via the BGANS. The effected zones of 1B, 1C, 2B and 2C were plotted on a map that was displayed on the wall of the EOC. The Policy Group made the PAD that the residents of Jackson County were not at risk as a result of the chemical incident. At 1029, Jackson County was notified via the BGANS that BGAD recommended zone 3B was to evacuate. It was determined that this had no effect on Jackson County and did not change their PAD. At 1046, Jackson County received information via FAX from BGAD that Estill zones E1, E2, E4, and E5 were being evacuated. The EMD determined that it did not affect Jackson County. He believed that zones E4 and E5 were not affected due to information reported further into the exercise. He later contacted both the Madison County EOC and BGAD and verified that zones E4 and E5 were not affected or evacuated.

### **Objective 4. Command and Control**

The Jackson County EOC was activated at 1013 and declared operational at 1046. The Jackson County Policy Group worked extremely well together. This was attributed to them working as a team and not as individual decision-makers. However, the Jackson County Judge, who serves as the lead decision-maker, was unavailable for the full exercise and gave authorization to the EMD

for decision-making purposes. Prior to departing the EOC, the County Judge signed a Declaration of Emergency for Jackson County. The EOC staff members were aware of their duties and responsibilities and maintained constant communication with the Policy Group and other staff members. The EMD held briefings at 1044, 1105, 1133, 1157 and 1330 at ENDEX. He ensured that all members of the staff were informed as to the current status of the Chemical Accident/Incident (CAI). However, it was observed that there was little or no feedback from the EOC staff. It is recommended that the EMD conduct a roll call of the staff to conduct an update of their emergency response function.

At 1050 the EMD directed that TCP/ACPs be established (simulated) for evacuees and that a reception Center/Shelter be activated (simulated) and the Red Cross be notified of shelter operations. At 1059 Jackson County also prepared to accept 600 evacuated students from Madison County at Jackson County Middle School.

#### **Objective 5. Public Notification, Instructions, and Emergency Information**

Jackson County received information via the BGANS of a Post Only emergency at 0912. At 1006, BGAD notified the Jackson County EOC of a Community Level Emergency involving the chemical agent VX. A hazard assessment was completed and it was determined that the citizens of Jackson County were not at risk. Jackson County does not possess TARs or sirens. The primary notification to the public was made through press releases and EAS messages through radio station WWAG. The press releases were issued at 1029 and 1207 notifying the citizens of Jackson County that they were not at risk, gave the current situation at BGAD, and to stay tuned to their local radio stations for further updates. An additional back-up system consisted of broadcasting a tone alert via their county emergency radio system. Many Jackson County residents were able to monitor this through their radio scanners. Press releases were identified numerically and shared with the JIC. This was an improvement from the previous exercise.

#### **Objective 6. Communications Systems, Facilities, Equipment, and Displays**

The Jackson County EOC is co-located with the City of McKee 911 Center. Communications equipment consists of four commercial and two FAX lines, four dedicated 911 telephone lines, RACES, police and fire radio system, and the use of an 800 MHz radio system. They also utilize their local emergency radio system as a backup that alerts the Citizens of Jackson County via personal scanners.

The facility consists of a main room, kitchen, office, and a restroom, shared by both men and woman. There was no bunking for 24-hour operations. The size of the EOC facility is not adequate for its intended use. The EOC will be relocated to a new location that will provide the adequate space to perform their emergency management mission. It is important that the EOC and City 911 Center be co-located in their new facility. This recommendation was based upon limited staffing and the necessity to man essential positions.

There are two (2) EMIS computers, however, they continue to lack the necessary training to operate them effectively. Wall charts, maps, and their sync matrix were used effectively throughout the exercise. However, the placement of the major event's status board was not positioned where all members of the EOC staff could observe it.

#### **Objective 9. Public Affairs**

The Jackson County PIO in association with the Policy Group prepared two press releases. Press release #1 was sent to the JIC and the local radio station WWAG at 1029. Press Release #2 was released at 1207 and FAXED to the JIC, radio station WWAG, and the Jackson County Sun Newspaper. The PIO effectively communicated with the JIC as to the status of Jackson County. Calls from the citizens of Jackson County were received at the 911 emergency communications desk and all inquiries in relationship to the CAI at BGAD were answered appropriately. The 911 Dispatcher handled all public inquiries requiring further information. It was recommended that public inquiries be transferred to the appropriate response organization within the EOC rather than be executed solely at the dispatcher desk.

The performance of the PIO in maintaining communication with the JIC and the Jackson County Staff and Policy Group was commendable and represents a vast improvement over the 1999 exercise.

#### **Objective 15. 24-Hour Operations**

The Jackson County EOC demonstrated their ability to maintain 24-hour operations. A simulated shift change was conducted at 1155 and the incoming staff briefed accordingly. There was no disruption within the EOC and the incoming staff was able to continue the responsibility of their respective positions.

This Page Intentionally Left Blank.

## POWELL COUNTY

### INTRODUCTION

Powell County demonstrated, in accordance with its Extent of Play Agreement, Objectives and Points of Review 1, 2, 3, 4, 5, 6, 9 and 15. The observations for specific objectives are detailed below.

#### **Objective 1. Initial Alert and Activation**

The Initial notification from BGAD was received in the Powell County 911 Dispatch Center at 0912 via the BGANS. The information received was not complete as it did not contain the wind direction and speed. The event was declared a Post Only Emergency by BGAD. At 0917, the EMD made a precautionary decision to simultaneously activate the EOC and initiate call down procedures for the EOC staff. The 911 Dispatch Center successfully demonstrated this very efficiently with their new automated equipment that utilized pagers, telephones and 800 MHz radios. These call down procedures were complete by 0922.

Upon the arrival of the County Judge and other participating EOC staff at 0930, the EMD declared the EOC operational and commenced holding a briefing for those present.

#### **Objective 2. Hazard Assessment.**

Upon receipt of the initial notification from BGAD via the BGANS at 0912 and subsequent additional updates at approximately 1008 and 1224, the Powell County EOC staff were able to make adequate assessments of the chemical event situations. However, the 2<sup>nd</sup> and 3<sup>rd</sup> email updates from BGAD provided additional and sufficient information for the Powell County EOC to make the appropriate decisions based on this information, especially concerning the additional VX chemical agent release.

The Powell County EOC staff successfully demonstrated their determination, initiative and capabilities in a timely manner, to correctly assess the chemical agent release incident and follow it through termination of the exercise play. This however, was without the utilization of the EMIS capabilities as the system was not operational during most of the exercise.

#### **Objective 3. Protective Action Recommendations and Decision Making**

At 0912, BGAD initiated a BGANS call identifying a chemical agent GB leak in igloo F-501. During this call, wind speed and direction were not provided. The Powell County EOC Assistant EMD called BGAD to verify if the daily work plan had been sent out yet and to get wind speed and direction. Upon request by the Powell County EMD, a FAX was received at

0943 from the KY CSEPP Office containing BGAD's Daily Work Plan for the day with the wind direction and speed.

The EMD and County Judge determined that Powell County was not at risk and that no further action was necessary to protect their citizens. However, the community prepared to assist the affected Initial Response Zones (IRZ) for possible evacuation to their community and to prepare the schools for shelter utilization. Fire departments, law enforcement and EMS were put on alert and standby. Route alert procedures, TCPs and ACPs were initiated and the EAS station transmitted a message to the community that there was a chemical event at BGAD and to advise them that they were not in any danger or risk. The situation was upgraded from a Post Only Emergency to a Community Emergency when a second event was reported by BGAD via FAX.

Powell County played a primary role in protective action implementation in providing various supplementary assistance resources. A shelter at Clay City School was opened to accept evacuees from Madison County.

Throughout the response, the Powell County decision-makers successfully demonstrated their capabilities as they coordinated and worked as a cohesive team in making the correct PADs for protecting their communities public, environment and property.

#### **Objective 4. Command and Control**

Throughout the response, Powell County EM EOC staff successfully demonstrated the cohesiveness, coordination and lines of communications between that of the EMD, Assistant EMD/CSEPP Coordinator and County Judge. This is essential in effectively establishing clear chains of command, responsible delegation of authority and correct protective action decision making. The EOC staff worked well together and demonstrated the team concept necessary to respond to this type of hazardous material event in their community through the knowledge and management of available information, personnel and resources.

The emergency operations center/911 dispatch center was staffed with representatives from the following agencies:

- County Judge Executive
- County EMD
- County Assistant EMD/CSEPP Coordinator
- Public Information Officer
- American Red Cross Representative
- (3) Kentucky Vehicular Enforcement Officers
- (2) Sheriff's Department Officers
- (3) Middle Fork Fire and Rescue
- Stanton Fire Department
- Lowell Fire and EMS
- Powell County Health Representative
- Powell County School Representative

Department of Transportation Representative  
Numerous Powell County EMA Participants and Volunteers  
Numerous Powell County EMS Representatives and Participants  
Numerous Powell County 911/Dispatch Representatives and Participants  
Numerous Volunteers serving in various capacities in the EOC

Early in the response, the EMD directed that fire, law and EMS departments be alerted and placed on standby. Estill County fire department and law enforcement assisted Powell County with traffic control points (TCPs) at the junction of Hwy 82 and Hwy 89. The Powell County Judge declared an emergency at 1028. Powell County EMD demonstrated the abilities for requesting supplementary assistance from supporting communities and organizations, while at the same time offering their assistance to those affected IRZ and Protective Action Zone (PAZ) communities.

#### **Objective 5. Public Notification, Instructions, and Emergency Information**

The Powell County EM PIO successfully demonstrated the alert and notification of the public with public instructions and emergency information during the entirety of this exercise. This was accomplished from the very onset with attempting to get an EAS message out to the local WSKV-FM radio station once directed to do so by the EMD at approximately 0936. This did prove quite difficult with the vast number of inquiring telephone calls that flooded the EOC thus tying up the telephone trunk lines in the community. This EAS message was finally relayed at 1008. In order to accomplish this, the PIO had law enforcement official's drive to the radio station and ask the station operator to make a call to the PIO and inquire what necessary emergency information needed transmitting. This EAS message was to assure Powell County residents that this was only a test regarding a chemical event at BGAD and to advise the public that they were not in any danger.

The PIO recorded the events occurring in the EOC and handled news media releases and press releases from the various CSEPP community EM agencies (BGAD, Madison County EMA, Estill County EM, KyEM and the JIC). This established and maintained required points of contact (POCs) through voice and FAX that deal with this essential and necessary activity. Contact was finally established with these agencies and maintained throughout the remainder of the exercise.

Since several of the EOC participants had to depart around noon to attend to a real world event, the EM PIO conducted an EOC shift change briefing at 1152. The PIO continued to support the JIC, BGAD and other EM agencies until the completion of the exercise.

#### **Objective 6. Communications Systems, Facilities, Equipment, and Displays**

The EOC staff was still moving in to the new EOC at the time of the exercise. Communication and ADP equipment needed to be installed and made operational.

The Powell County EM EOC staff successfully demonstrated this objective. The EOC had a new digital clock purchased prior to the exercise that proved to be useful. However, additional visual display improvements were needed in their EOC to enhance their capabilities such as larger and more detailed maps, display status boards and equipment (additional FAX for a combination of a dedicated incoming and outgoing FAX capability).

## **Observation**

**Description:** Better Displays, Maps and Equipment in EOC

**Discussion:** Additional visual information status boards, FAX machine, computers, maps and multi-media projector capabilities possibly need to be incorporated.

**Recommendation:** The following equipment should be incorporated to improve the capabilities and management of information flow for everyone's use in the EOC:

Enlarged maps of the IRZ/PAZ/BGAD marked with degrees, distances, and plume model wedge should be added. The map should possibly be hung on the wall with a magnetic board backing. Appropriate magnetic indicators for fire and law enforcement resources, TCP/ACPs locations, evacuation route indicators (arrows), schools/locations for shelters/mass care, and decontamination sites, should be placed on the large map. This will present an excellent visual presentation for EOC staff information and viewing. This will also be beneficial when responding to public inquiry calls and actions taken during the emergency.

An additional FAX machine be incorporated and dedicated for separate incoming and outgoing FAXES.

Appropriate status boards be developed that address resources and capabilities such as tasking and assignment of law enforcement, fire department resources, schools, hospitals, ambulances, shelters, etc. These are useful for all of the EOC staff to view and in disseminating information more quickly and effectively during their EOC activities.

Additionally, upon repair and return to the county, recommend the use of the EM EOC's 3M Multi-media projector in displaying an event log and D2PC plume model on the EOC wall.

## **Objective 9. Public Affairs**

The Powell County's EM PIO and EOC staff successfully demonstrated this objective. They were proficient in receiving and handling various public inquires with correct and proper responses. They were adept in their record keeping, taking notes and following through with the necessary follow-ups of each call until closure was completed. They were also very efficient and effective in sending required emergency public information news media releases and exercise

information via commercial phone and FAX to the BGAD, State, JIC and surrounding CSEPP counties, during the exercise period as it became available.

**Objective 15. 24-Hour Operations**

The Powell County EMD and EOC staff successfully demonstrated their ability to maintain a 24-hour operation by performing a shift change in the EOC at 1210. The EMS deputy director was designated as his replacement. Prior to his departure along with several others to attend a real world function, he briefed his replacement as to the events of the exercise. Additional positions were shifted to continue supporting the exercise until ENDEX was declared.

This Page Intentionally Left Blank.

## ROCKCASTLE COUNTY

### INTRODUCTION

Rockcastle County demonstrated, in accordance with its Extent of Play Agreement, Objectives and Points of Review 1, 2, 3, 4, 5, 6, and 9. The strengths and observations, as appropriate, for specific objectives are detailed below.

#### **Objective 1.** Initial Alert and Activation.

The initial notification was received at the County 911 Center at 0912. The 911 Center has the BGANS dedicated phone installed there for 24-hour notifications. The EMD received the Emergency Notification Form (ENF) at 0915. The dispatcher immediately initiated the call down roster by telephone to alert the EOC staff. The staff promptly arrived and the EOC was declared operational at 0935.

#### **Objective 2.** Hazard Assessment

Following the receipt of each ENF, the EMD consulted the D2PC current plume model and wind direction information. The initial ENF was for a Post Only Emergency and wind direction and speed was not included. The EMD called the State EOC to verify wind information and determined no protective actions were necessary.

At each of the next three issues of the ENF, the EMD again consulted the plume models and compared them with the information on the Community Emergency forms. No protective actions on the part of Rockcastle County were recommended due to wind direction. However, discussions did ensue concerning shadow evacuations from other counties and potential traffic flow problems. A decision matrix was used to assist in making necessary precautionary notifications.

#### **Objective 3.** Protective Action Recommendations and Decision-Making

The receipt of the initial ENF at 0912 was processed by the EMD who decided to activate the EOC to monitor the situation. The EOC was operational at 0935 and a Post Only Emergency was verified with the State EOC at 0934. The EOC staff initiated contact with the Health Department, Souder Nursing Home, Rockcastle County schools, the hospital, the transportation contractor (Rural Transit Enterprise Coordinated Inc.) and the American Red Cross for situation briefing and stand-by.

At 1006 a Community Emergency was declared for a second event recommending the evacuation of Zones 1B, 1C, 2B and 2C. The EMD determined that the wind direction dictated that no actions by the county were required. The staff was briefed on the plume location and

advised to monitor the situation for traffic congestion and possible evacuees entering the county. The PIO started to work on a press release and an EAS message to alert the county residents of the incident at BGAD. The 3<sup>rd</sup> ENF was received at 1026 to include evacuation of Zone 3B. Again, the county required no actions.

The 4<sup>th</sup> ENF was received at 1234 and no changes were made to Rockcastle Counties' PADs. During the response, the D2PC Plume Model was updated on a regular basis for wind direction and movement of the plume. The EOC staff was consulted as to their readiness and current status.

#### **Objective 4. Command and Control**

The EMD was recently hired as a part-time position. She obviously had studied the plans and knew her responsibilities and role as EMD. With the help of several assistants, she directed the flow of information to and from her staff. Frequent updates and briefings were held and the staff was motivated to think ahead to any possible county involvement, even though they were not in the affected areas.

The initial ENF did not include wind speed and direction, so she phoned the State EOC to receive this information. Based on the lack of wind data, she immediately activated the call down system and made the EOC operational. Due to limited actual involvement in the PAD process, she used the opportunity to have the various agencies update their plans and procedures. She also gave them "what if" situations to work through and discuss with the staff.

The EMD displayed exceptional command and control. She kept her staff informed, provided guidance and direction to the players and motivated them to get involved. She is to be commended for improving the county preparedness to a CSEPP event.

#### **Objective 5. Public Notification, Instructions, and Emergency Information**

The EMD directed the PIO to send out a press release and an EAS message after receipt of ENF #3 to inform the Rockcastle County citizens of the breaking events at BGAD. The message was timely and was a basic "stay tuned" informational message. The message gave assurance to the residents that no protective actions need to be taken at that time and provided a citizen information number to call for further questions. At 1045, the EAS message was FAXED to WRVK AM 1460 radio. The station verified the message to play and called back the EOC for confirmation. At 1056, the station simulated the EAS broadcast. Also at the same time, a press release was sent to the local newspaper, The Mount Vernon Signal, and to the Charter Communications Cable Company.

Plans and procedures in place to route alert the two Rockcastle County Zones were discussed with the EMD. Communication was established with the local emergency response

organizations, the area hospital and nursing home to alert them of the situation. The capability to alert and notify the public was successfully demonstrated.

#### **Objective 6. Communications Systems, Facilities, Equipment, and Displays**

The EOC is equipped with the proper equipment and displays needed to perform the essential operations of an EOC. The EOC has 12 phone lines, 2 FAX machines and 2 computers capable of displaying both EMIS and email messages. The wall displays and status board was updated in a timely manner and the agencies had the information and equipment needed to perform their duties.

The EOC is located next to the 911 Center in the County Courthouse. It is staffed 24-hours a day and has the BGANS phone installed. The 911 Center is the dispatch for all county emergency response organizations, to include the local police departments. The 911 dispatcher had the appropriate ENFs handy, answered all BGANS calls and relayed the information to the EMD. UHF/VHF was the primary communications system with 800 MHz and cell phones as backup systems. In addition, the EOC includes a RACES room for use by field activity teams communications.

All the correct procedures and protocol were used during the course of the exercise and the communication systems performed as expected.

#### **Objective 9. Public Affairs**

Although Rockcastle County was not in an affected area, the County PIO remained proactive in the distribution and dissemination of information to the public. The press release and EAS messages were timely and the procedures to notify the media and the EAS station were demonstrated. The receipt of information from the JIC was limited and efforts to FAX or call in the press release to the JIC resulted in busy signals.

Two dedicated staffers handled response to media and public inquiries. Information passed along to the inquirers was appropriately coordinated with the PIO and EMD. Citizen Information Lines were established and approximately 5 calls for information were handled.

The county has the capability to keep the public informed. However, the sharing of more information from the other counties, the State EOC and JIC needs to be addressed and equipment needs to be kept updated and sufficient to keep the counties informed of current events and situations.

This Page Intentionally Left Blank.

## LAUREL COUNTY

### INTRODUCTION

Laurel County demonstrated, in accordance with its Extent of Play Agreement, Objectives and Points of Review 1, 2, 3, 4, 5, 6, 9, and 15. The observations for specific objectives are detailed below.

#### **Objective 1. Initial Alert and Activation**

The London-Laurel County Communications Center received notification via BGANS of a Post Only emergency from BGAD at 0912. The DEM, State Area Manager, and Red Cross Executive Director were already present in the EOC. The DEM notified the County Judge Executive and the Mayor of London of the event. At 0937 key response personnel were notified and placed on standby should the incident escalate.

At 1006 the BGAD declared a Community Level Emergency. The DEM initiated a simulated call down of EOC Staff. He also authorized the opening of a reception center at the National Guard Armory, the shelter at the Laurel County High School and the staffing of traffic control points at I-75 (Exits 38 and 41), West HWY 80 and the HWY 192 by-pass. EMS personnel were asked to be in place at the reception center and shelter if needed. These actions were put in place as a precaution to be ready to receive spontaneous evacuees from Madison County.

The EOC was declared fully operational at 1052. Actions taken for initial alert and activation were consistent with approved plans and implementing procedures.

#### **Objective 2. Hazard Assessment.**

Laurel County received the necessary information from BGAD to identify the emergency classification levels throughout the emergency exercise. Information received from the BGANS updates was verified with plume projections displayed in the EMIS. Plans were checked and substantiated to determine that the projected hazard areas for populations at risk in Madison County and Estill County were not evacuating to Laurel County.

#### **Objective 3. Protective Action Recommendations and Decision-Making**

The DEM and EOC staff were effective in translating the PARs made by the BGAD. This resulted in efficient and effective decisions that a mass evacuation of the impacted population in Madison County would not travel south to London and Laurel County. Since there was potential for spontaneous evacuees to travel to their area for shelter, the opening of a reception center at the National Guard Armory and a shelter at the Laurel County High School were authorized.

The County Judge Executive and the Mayor of London were kept informed of the protective action recommendations and decisions made throughout the incident.

#### **Objective 4. Command and Control**

The ability to direct, coordinate and control emergency activities in London and Laurel County were demonstrated effectively by the DEM. The DEM involved other staff in decision making and provided the required leadership to manage an effective response to the incident scenario. Coordination with other non-CSEPP jurisdictions and non-government agencies took place for supplemental and mutual aid resources. The DEM referred to the emergency plans and procedures to assure appropriate response actions were taking place.

#### **Observation**

**Description:** Lack of Coordination/Communication with CSEPP Jurisdictions

**Discussion:** EOC Staff communicated only once with the State EOC and not all with the other CSEPP jurisdictions. Communication with non-CSEPP jurisdictions was simulated.

**Recommendation:** It is recommended that Laurel County EOC Staff utilize various communication resources to more effectively communicate with neighboring CSEPP jurisdictions. This additional communication will enhance coordination and provide for efficient and effective response.

#### **Objective 5. Public Notification, Instructions, and Emergency Information**

The DEM and the PIO were proactive in informing the public in Laurel County about the incident at BGAD. Three press releases were authorized, prepared and released. Press release #1 at 0937 informed the public that they were not at risk from the incident. The Press release #2 at 1102 informed the public of the closing of schools in Laurel County so that a shelter could be opened at the Laurel County High School. Residents were advised that traffic could be heavy. Press Release #3 at 1230 reaffirmed that Laurel County was not at risk and asked any spontaneous evacuees arriving from Madison County contact the American Red Cross at the High School for assistance.

#### **Objective 6. Communications Systems, Facilities, Equipment, and Displays**

The facility utilized for the Laurel County EOC is the London-Laurel County Communication Center. Radio communications equipment in the facility was adequate for the jurisdiction. Actions need to be taken to locate the appropriate displays and status boards that would be required to track events and resources if the PAD in Madison County evacuated a large population to Laurel County.

The EMIS was operational in stand-alone mode but the interface between the Depot and Laurel County did not function after the initial plume plot. Automated emergency plans and procedures were on disk and readily attainable.

## **Observation**

**Description:** Use of Additional EOC Equipment

**Discussion:** The room selected for the Operations Room was adequate for the level of response for this exercise event. However, had more staff been required the room would have been crowded. A map with a movable plume wedge was not available to assist in verifying the plume direction of travel. The erasable white board was used only to identify zones evacuated. One telephone handset was adequate for this response but would be inadequate if more staff were in place.

**Recommendation:** Renovation or reorganization of existing space is recommended to create a larger operations room. Appropriate maps need to be obtained or located to support a CSEPP EOC response. The erasable white board can also be used for a major event log to aid in briefing new staff and documenting response actions. Installation of additional telephone jacks and telephone handsets is suggested allowing more people to utilize telephones

## **Objective 9. Public Affairs**

The PIO provided accurate, complete, clear, timely and coordinated information to the public and the media. Press releases were FAXED to the JIC once information was received that the JIC was operational.

The DEM and the State Area Manager handled telephone inquiries from the public. Public inquiries could have been coordinated with the Madison County EOC and the State EOC for quicker resolution rather than just providing a referral telephone number.

## **Objective 15. 24-Hour Operations**

Appropriate steps were taken early in the response to plan for notifying additional staff to report for duty to relieve EOC Staff. Plans and procedures were consulted and reviewed.

Simulation of the notification of secondary relief staff was coordinated with the EM. Additional mutual aid resources were identified for the EMS and the TCPs. The ability to maintain a 24-hour operation was successfully demonstrated.

This Page Intentionally Left Blank.

## LEXINGTON-FAYETTE URBAN COUNTY GOVERNMENT

### INTRODUCTION

Lexington-Fayette Urban County Government was able to demonstrate, consistent with its Extent of Play Agreement and applicable plans and procedures, Objectives and Points of Review 1, 4, 6, 8, 9, 12, and 14. The strengths and observations for specific objectives are detailed below.

#### **Objective 1. Initial Alert and Activation**

The initial alert and notification was received by BGANS at 0912 by the Lexington/Fayette 24-hour warning point (911 Emergency Center) indicating an accidental release of GB nerve agent from M-55 rockets at BGAD. The form classified the event as a Post Only emergency with no indication of wind direction or wind speed. The notification form was FAXED to the DEEM and received at 0924. At 0930, a call-down was initiated activating pagers with an alert message of an incident and stand by instructions.

At 0934, the DEEM received a FAX with the work plan of BGAD for the day. At 1006, the 24-hour warning point received a call from BGAD of a community emergency involving a release of VX nerve agent from M-55 rockets with smoke detected and a wind direction from SW at a speed of 3.2 M/S. The DEEM received the FAX from the 24-hour warning point at 1015. A coordinated decision of the senior staff was made to begin call down procedures for mobilization and activate the EOC. There was also a call-down roster available if needed for backup.

At 1028, the DEEM staff moved to the EOC on the third floor of the Police Department Building on the next block. The DEEM does not have a permanent EOC and sets up on an as-needed basis in this building. A staff sign up sheet was placed inside the door of the EOC. The entire building is secured on the first floor by a locked door and allows authorized admittance only.

The EOC staff included DEEM, Medical, Human Resources, Public Information Officers, Transportation, VOLAG, Schools, Police, and Logistics.

At 1224, BGAD sent an update notification form with a current PAR because of a change in wind direction. Fayette County was unaffected.

Although there was no status board updated regularly, the Operations Officer gave periodic briefings and kept the staff informed of the current status of events.

#### **Objective 4. Command and Control**

LFUCG responded effectively to the chemical accident/incident based on their CSEPP response plans. The Operations Officer was in charge of the emergency response operation at the EOC and demonstrated effective control throughout the exercise. There was a clear chain of command, knowledge and management of available information, personnel and resources and a responsible delegation of authority.

The flow of information was mainly from the Commonwealth of Kentucky and BGAD. There was no coordination of information with the surrounding counties including the IRZ. Although Fayette County was not asked for support in this event, they were standing by to initiate those actions necessary to prevent, minimize, or mitigate hazards to public safety or to the environment.

#### **Objective 6. Communications Systems, Facilities, Equipment, and Displays.**

The CSEPP Office was upstairs from the Directors office and all messages had to be hand delivered. At 0930, based on the information received, the determination was made by key personnel that the incident at BGAD was Post Only. The decision was made to notify the EOC staff to be on standby in case the event escalated.

Offices were cramped and there was no room for EOC operations. A temporary EOC was set up in the Police Training Room (approx. ½ block across street) when needed. For this exercise, the EOC had been set up prior to STARTEX. The temporary EOC, when operational, was equipped with 2 laptops, 2 FAX machines (incoming and outgoing), 1 CSEPP area map, 1 BGAD area map, 2 status boards and tables/telephone lines for each EOC staff member. There was no EMIS drop in the temporary EOC. However, EMIS was available at the office but was not utilized during the exercise.

The EOC was on the third floor of the Police Department and security was in place. Each EOC staff member was required to sign in before entering the EOC.

The staff was efficient in their EOC organization. Three volunteers served as call takers and routed calls to the appropriate persons. Each call was recorded on a call sheet for tracking and tasking. Display boards were utilized for pertinent information (Interstate closings, phone numbers, etc.).

As additional information was received, the DEM Operations Officer gave up-dates to the EOC staff. At 1127, the DEM Operations Officer and the LFUCG Director plotted the plume on a large map in the EOC. They also identified the location of igloo F-606 on BGAD that was the source of the problem. He also updated the staff with information concerning the arrival of evacuees at the Jacobson Park TCP and Decontamination facility.

Throughout the course of the exercise, the CSEPP Coordinator attempted to access her email server in order to receive updated information. This was finally accomplished at 1214, with 45 messages from different sources.

At 1154 a draft Disaster Declaration was FAXED to the Area 13 Director. No further actions were noted in response to the declaration.

At 1207, the EOC received an update from the State EOC via telephone. PADs were updated. This information was briefed to the EOC staff and a decision was made to place the Dunbar High School on standby for evacuees.

## **Observation**

**Description:** Lack of Communication Between Jurisdictions

**Discussion:** Communication was limited between the EOC and outside jurisdictions. No EMIS was in place at the temporary EOC and there were several technical problems with computer systems, FAX machines and radio communications with field players. The EOC is equipped with the necessary communications equipment (excluding EMIS). However, training on the equipment could enhance their capabilities. Telephone systems and operational procedures seem to be adequate to handle the influx of calls that would occur during this type of event.

**Recommendation:** Attention needs to be focused on communicating between field players and other jurisdictions. Training of EOC staff as to usage of FAX machines, telephone routing, etc. would be beneficial to the overall operation. Special emphasis should be made to communicate with outside jurisdictions, especially response teams in the field in order to keep abreast of the situation.

## **Observation**

**Description:** Permanent EOC Needs Consideration

**Discussion:** The EOC in LFUCG is a temporary facility that is activated only when needed. The facility is part of the Police Department training complex and is most often occupied with training classes or other community functions.

Upon notification of a Community Event, the DEEM/CSEPP personnel notify the Police Department of the need for the facility. Once the facility is cleared, the EOC staff begins to set up their equipment. This process takes approximately 2 hours to complete. The DEEM/CSEPP department has MOUs in place that gives them priority use of the facility in the event of an emergency. Barring technical and mechanical difficulties, the EOC is equipped with adequate equipment and displays to operate.

**Recommendation:** The need for a permanent EOC is evident in a County of this size and population. Considerations should focus on assisting the county in providing a permanent

EOC space. Delays in operations are inevitable under the current situation. In addition, technical and mechanical malfunctions could be avoided if equipment was stationary and therefore could be tested and or used on a daily basis.

### **Objective 8. Traffic and Access Control**

The Lexington-Fayette County Government successfully demonstrated this objective.

At 0930, the Lexington-Fayette County Government EOC notified the Lexington Police via pager of a chemical event at the BGAD. The police then implemented their TCP and Reception Center Plan. This plan required the Lexington Police to pick up Reception Center signs, barricades, generator powered traffic direction board signs, and traffic cones from the DEEM warehouse. A police van then proceeded to Jacobson Park to establish the TCP and to designate the location of the Reception Center.

At 1007, the Lexington Police arrived and began placing signs at designated locations. At 1020, the police completed placement of these signs and established a TCP at the entrance to Jacobson Park (Kentucky State Road 418 and US 25/421).

At 1020, the Lexington Police Command Post arrived at Jacobson Park and set up a Reception Center in the parking lot adjacent to Pavilion Number 1. At 1038, a police vehicle arrived with a traffic direction sign and placed it approximately 600 meters east of the Jacobson Park entrance.

After this traffic direction sign was put in place, the police officer assisted the other police officer at the TCP. Additionally, two traffic direction signs were placed northbound on I-75 in the vicinity of mile markers 102 and 104, directing evacuees to the Reception Center and Decontamination Site. At 1057, three evacuees arrived at the TCP. The evacuees were interviewed, screened for contamination, and directed to the decontamination site.

The Lexington Police Officers had an excellent understanding of required duties at the TCP. They were knowledgeable of county evacuation routes and were able to direct traffic in accordance with county plans. They were in radio contact with Dispatch throughout the exercise, and received limited updates on the chemical incident while at the TCP. The police officers were knowledgeable of chemical agent exposure symptoms.

The Lexington-Fayette County Government followed their plans and procedures.

### **Objective 9. Public Affairs**

PIOs reported to the temporary EOC upon receipt of a page notifying them of a Community Event at BGAD. After signing in and the initial briefing of the situation by the DEEM Operations Officer, the PIOs conversed among themselves as to any actions they needed to take.

They determined, along with the DEM Operations Officer, that no immediate dissemination of information to the Lexington/Fayette population was necessary.

Throughout the exercise, the PIOs examined FAXES and other information updates to determine the need for public broadcast. No broadcasts were noted during the course of the exercise.

PIO play was limited, however they did receive and respond to mock media calls. It had been planned to send one of the PIOs to the Jacobson Park TCP/Decontamination area to field media and public information questions. This plan was modified and all PIOs stayed at the EOC.

## **Objective 12. Medical Services - Medical Facilities**

At 0800, evaluators arrived at the University of Kentucky Medical Center (UKMC). Communications were observed in the Flight Operations Center that served as the ER's locus for receiving all external and emergency communications. The Decontamination Team began to set up the Decontamination Area at 0920. The ER staff was being trained in hazardous materials decontamination and attempted to incorporate their participation in this exercise into the class. They understood from sources at other hospitals that simulated patients would arrive at 0900. They began to set up the Decontamination Area because the time they allowed for the class and exercise did not permit delays and participation beyond 1200.

The ER Manager informed Security at 0930 that they were setting up the Decontamination Area to receive chemical weapons casualties. At 0935, two of the Decontamination Team members were suited and connected to their supplied air source. Two security officers arrived at 0940, and they taped off the external front entrance and the internal back entrance to the ER. The Decontamination Area was ready to receive patients at 0942.

At 0948, the Decontamination Team began practicing processing out Decontamination Team members. For a while, they practiced getting into and out of the PPE.

The hospital hazardous materials management (waste management) staff arrived at 1015. They were tasked with pumping out contaminated run off from the decontamination operation, which was collected in a pool made of four pieces of plywood and a sheet of plastic. At 1120, the Decontamination Area was disassembled.

Because of the lack of simulated patients for evaluation, one of the evaluators was presented to ER nursing staff as a simulated patient at 1130. The ER Manager correctly identified that this mild nerve agent casualty, who had not been decontaminated or received any MARK 1 kits in the process of ambulance transport to UKMC, should receive one MARK 1 kit and then undergo decontamination.

The ER was short staffed (two RN call-ins) and crowded with patients by 1100. Therefore, when the evaluator was injected as a simulated patient, medical staff could not admit and evaluate him without disrupting normal ER operations. Under these circumstances, the ER

Manager, who was participating in the class and exercise, evaluated the simulated patient. It was not possible to observe casualty-tracking procedures.

At 1155, the Fayette County EOC called the UKMC Safety Director and informed her of the incident at the BGAD, the name of the agent, appropriate antidote, probable symptoms, and the number of victims on the way to the UKMC ER. The Safety Director immediately called the ER Manager and passed on this information.

An unidentified member of the TCP staff from Jacobson Park called the Charge Nurse at 1205 and informed her that decontaminated patients were on the way to the UKMC. At 1250, evaluators ended play as instructed by the Controller at the Fayette County EOC. The Controller thought that the patients from Jacobson Park were unlikely to arrive if they had not already done so.

The Pharmacy had in stock 34 0.4-mg/ml 20-ml vials of atropine with an expiration date of June 2003, 125 0.4-mg/ml unit-use ampoules of atropine with an expiration date of August 2003, and 50 one-mg five-ml atropine injectables with an expiration date of September 2002. Additionally, the Pharmacy had 12 one-gm 2-PAM vials.

The hospital had 40 crash carts with two 0.4-mg/ml one-ml vials of atropine and two one-mg atropine syringes per crash cart; crash cart medications are regularly checked for expiration dates and kept current. Other than the crash carts, the Emergency Room had one one-mg 10-ml atropine syringe with an expiration date of February 2002.

Noted strengths were the use of supplied air-lines and procedures to facilitate decontamination set up. Observations made during the exercise included problems with UKMC access control, lack of antidote, lack of CSEPP training, non-optimal incident notification channels, decontamination set up, use of diluted Clorox for decontamination, location of the supplied air lines manifold, and exercise coordination and hospital participation. Despite the lack of resources and training, the UKMC staff has created a working Decontamination Team and demonstrated strong motivation and interest in developing the capacity to receive chemical weapons casualties.

The UKMC Disaster Response Plan was reviewed, and it included a plan for casualty tracking in incidents such as chemical weapons releases. Key elements of the plan include a disaster tagging system, continuous flow of information from the ER to the Command Center with frequent updates, flow of Command Center information to the Family Center for family notification, maintenance of a patient disposition log in each treatment area, flow of patient disposition information to the Command Center, and flow of patient disposition information to the Public Affairs Department following family notification. The Plan as described appeared to contain an adequate casualty tracking system.

## **Strength**

**Description:** Supplied Air-Lines

**Discussion:** UKMC Decontamination Team uses Level B suits with supplied air respirators manifolded from the medical air supply lines. This demonstrates a higher than usual level of protection and a commitment by UKMC to preparing to receive chemical weapons casualties

**Recommendation:** UKMC's use of Level B suits with supplied air respirators is a best-management practice that should be emulated by other CSEPP participants.

## Strength

**Description:** Decontamination Set Up

**Discussion:** Although UKMC currently uses a portable decontamination system, they have painted outlines for equipment locations in the Decontamination Area. This allows more rapid set up of the portable system and Decontamination Area and decreases the number of people necessary to accomplish set up.

**Recommendation:** UKMC's use of a permanent template for decontamination set up represents a best-management practice which should be emulated by other CSEPP participants.

## Observation

**Description:** Exercise Coordination and Hospital Participation

**Discussion:** As a result of conversations with DEEM staff, UKMC staff expected that simulated patients in the exercise would arrive at about 0900. Because of this expectation, UKMC planned to have ER staff available to participate in the exercise until 1200. The exercise did not start until after 0900 and delays occurred. Simulated patients were to come through the decontamination site at Jacobson Park and not directly to UKMC. As a result, UKMC ER staff did not have sufficient time left before 1200 to evaluate, decontaminate, and treat the simulated patients and subsequently go through a "hot wash" with evaluators. The UKMC ER Manager requested that more precise estimates of patient arrival times be given in future exercises so that UKMC could plan to have ER staff available to participate without incurring undue drains on staff resources and costs.

Also, the UKMC ER staff planned to participate in the exercise and a hazardous materials course concurrently because both were scheduled at the same time. This posed difficulties in fully executing exercise activities and required that some of them be performed incompletely and out of sequence.

**Recommendation:** CSEPP officials and DEEM staff should communicate estimated patient arrival times more precisely so that participating hospitals can have appropriate staff available without incurring excessive drains on resources. UKMC and other participating hospitals should avoid scheduling other activities, such as training courses, at the same time as CSEPP exercises because this detracts from the performance of both activities.

## Observation

**Description:** Lack of Antidote

**Discussion:** Inventory of UKMC antidote stores revealed that UKMC had no MARK 1 kits in the ER or Pharmacy. Furthermore, ER and Pharmacy staff did not know what MARK 1 kits are. The hospital's current supply of atropine could be used to treat many casualties, but stores of 2-PAM (total of 12 grams) were inadequate. Furthermore, most of the atropine and all of the 2-PAM were not stored in the ER and so were not available to treat arriving casualties immediately.

**Recommendation:** Kentucky CSEPP officials should make sure that hospitals and pre-hospital care providers expecting to receive nerve agent casualties have adequate stores of MARK 1 kits and other antidotes available in patient treatment areas so that arriving casualties can be treated immediately. Additionally, auto injectors of 10 mgs of diazepam should be available to treat severe nerve agent casualties. All staff who might administer MARK 1 kits should be trained in their use.

## Observation

**Description:** Lack of CSEPP Training

**Discussion:** UKMC ER physicians and nurses have received no CSEPP training. Additionally, they were not even aware such medical training exists. The ER Manager has taken the MMST course, and one other nurses received some training on chemical weapons agents from the Kentucky Health Department. Because of this, the ER medical and nursing staff did not have a high degree of confidence in their ability to distinguish mild, moderate, and severe nerve agent casualties and to determine what treatment was appropriate for each casualty.

**Recommendation:** Kentucky CSEPP officials should make sure that UKMC medical and nursing staff are trained in distinguishing the severity of effects and appropriate treatment for nerve agent and mustard casualties. UKMC medical and nursing staff should exercise in making these determinations so that they become skilled and confident in doing so.

## Observation

**Description:** Non-Optimal Notification Channels

**Discussion:** The UKMC Safety Director was the designated contact for the Medical Center, and the Fayette County EOC notified her of the incident and expected simulated patients. ER staff expected the notification to be received directly by the Flight Operations Center as emergency notifications typically are at UKMC.

**Recommendation:** UKMC and the Fayette County DEEM should clarify that the Flight Operations Center is the appropriate contact for UKMC. Flight Operations is the 24-hour a day designated emergency communications center for UKMC for all other operations. This will preclude the possibility of delays in notification of ER staff of chemical weapons incidents.

**Observation**

**Description:** UKMC Access Control

**Discussion:** When Security was activated, they provided two officers to cover the ER entrances. No other access control was demonstrated raising the strong risk that a contaminated patient could enter the facility through one of the more than 30 other entrances, contaminant the hospital, and shut down its operation.

**Recommendation:** Decontamination Team activation should include Security implementing access control for all hospital entrances. This may require additional Security (or UK police) personnel because of the large size and number of entrances of UKMC. However, hospital lock down is essential in responding to a chemical weapons release to prevent hospital contamination and shut down.

**Observation**

**Description:** Use of Diluted Clorox for Decontamination

**Discussion:** The Decontamination Team indicated that they would decontaminate patients presented to them using a solution of a 1:20 dilution of Clorox. This is not currently standard practice accepted by the mainstream of practitioners of decontamination and treatment. Although the use of a 1:20 dilution of Clorox and stiff wire brushes was previously the standard practice, recent concerns about inducing skin irritation have shifted the standard practice accepted by the mainstream to the use of soap and water and soft brushes. This avoids skin irritation of the decontaminated person. Although reversible and mild in many, skin irritation can be quite severe in some individuals who are decontaminated using the previous practice.

**Recommendation:** UKMC should adopt the current standard practice of using soap and water and soft brushes for decontamination. This will prevent decontamination

practitioners from causing harm in decontaminated people by inducing adverse skin effects of irritation.

## **Observation**

**Description:** Supplied Air-Lines

**Discussion:** UKMC utilized supplied air from a manifold just inside a sliding glass from the outdoor Decontamination Area. The doors had to be kept open (to prevent chaffing of the lines,) which could lead to contamination of the facility. In addition, the distance between the manifold and the Decontamination Area required long air lines, which presented trip and safety hazards. This also presented the risk of the air lines being squeezed, obstructed, or punctured.

**Recommendation:** The manifold should be relocated outside the sliding glass doors adjacent to the wall next to the Decontamination Area. Retractable air line reels should be used to minimize trip and safety hazards.

## **Objective 14.** Screening, Decontamination, Registration, and Congregate Care of Evacuees

The Lexington-Fayette County Government successfully demonstrated this objective.

The Lexington-Fayette County EOC notified the Lexington Fire Department Hazardous Materials Chief, via pager at 0930, of a chemical event at the BGAD. A second pager notification was sent at 1021 indicating a "Community Emergency". At 1038, the HAZMAT Chief made the decision to activate a decontamination site at Jacobson Park in accordance with the Lexington-Fayette Urban County Government decontamination plan.

At 1105, the HAZMAT Chief arrived at the decontamination site that was to be set up in proximity to the park service road north of the park main gate. At 1106, Lexington Engine #2, HAZMAT #1, and the Special Response unit arrived at the decontamination site with a sufficient number of HAZMAT personnel.

The HAZMAT Chief quickly designated a specific area to set up decontamination operations and zones of isolation. By 1109 decontamination set-up had begun. During the decontamination operations set-up, three evacuees arrived at the decontamination site at 1111. The HAZMAT team utilized their public address system to direct the evacuees to a predetermined staging area until decontamination set-up was complete.

At 1118, all decontamination zones were established and by 1133 the decontamination site was operational. The evacuees were screened and a determination was made that decontamination procedures were required. The first evacuee entered the decontamination corridor at 1140. At 1144, the first evacuee completed the decontamination process and the second started.

The second evacuee completed decontamination at 1148 and by 1150 the third evacuee was in the decontamination process. At 1154 the third evacuee completed decontamination and was moved into the treatment/triage area from which the evacuee would be transported to the appropriate medical facility. Technical decontamination was completed at 1158 and decontamination operations ceased at 1200.

Decontamination was performed in accordance with the established plan of the Lexington Fire Department. The Lexington HAZMAT responders were highly proficient, both individually and as a team.

This Page Intentionally Left Blank.

**BLUE GRASS COMMUNITY CSEPP EXERCISE 2000  
(Blue Grass CSEPP EX 00)**

**EXERCISE REPORT**

**APPENDIX 1: ACTION PLANS**

This Appendix contains the action plans of the Blue Grass Community elements. Each action plan addresses a finding identified in Blue Grass CSEPP EX 00 for the following:

Blue Grass Chemical Activity/Blue Grass Army Depot .....	1-3
Blue Grass Community .....	1-9
Garrard County .....	1-10

This Page Intentionally Left Blank.

**ACTION PLAN FOR BLUE GRASS CHEMICAL ACTIVITY/  
 BLUE GRASS ARMY DEPOT  
 Blue Grass CSEPP EX 00  
 (October 25, 2000)**

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
BG00A01.1	Failure To Notify Off-Post Community Within 5 Minutes	BGAD Commander BGCA Commander Director For Operations	January 2001
<p>CORRECTIVE ACTION/COMMENT: Actions have already been initiated to provide the Toxic Chemical Crews with the means to immediately notify the EOC of all events. It is essential that immediate notification be made directly to the EOC, otherwise the five minute notification to the community cannot be met. The key aspect of notification to the community is to provide a "heads-up" notification within this time period. The requirement to provide a Protective Action Recommendation within five minutes should be re-evaluated. Presently, our goal is to do both in five minutes and our procedures will be tailored to meeting this goal. It should be noted that the amount of information that must put together and transmitted makes this very difficult to accomplish (notification and a protective action recommendation).</p> <p>Areas needing improvement (check all that apply):</p> <p> <input checked="" type="checkbox"/> Training      <input type="checkbox"/> Facilities      <input type="checkbox"/> Plan(s)      <input type="checkbox"/> Other  <input type="checkbox"/> Equipment      <input type="checkbox"/> Staffing      <input type="checkbox"/> Procedures         </p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
BG00A01.2	Depot Siren System Activation	BGCA Commander Director For Operations	January 2001
<p>CORRECTIVE ACTION/COMMENT: EOC Personnel have been trained and the equipment is in place to sound the sirens. This was the case prior to the exercise. This was an oversight on our part to either ring the sirens ourselves or to notify Madison County to ring the sirens.</p> <p>In order to ensure we do not overlook this in the future, a checklist item has been added to our EOC Journal. After notification is made to the Madison County EOC, Depot sirens will be activated</p> <p>Areas needing improvement (check all that apply):</p> <p><input checked="" type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input type="checkbox"/> Procedures</p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
BG00A02.1	Non-Performance Of Requirements, RTAP Procedures	BGAD Commander Chemical Operations Division	January 2001
<p>CORRECTIVE ACTION/COMMENT: RTAP #352, located at Operational Control Point (OCP) 1, was not operated IAW the installation SOP. Specifically, the RTAP was not grounded; the heat trace sample lines were not plugged into a power source; and a mid-day agent challenge was not completed.</p> <p>Areas needing improvement (check all that apply):</p> <p><input type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input checked="" type="checkbox"/> Procedures</p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
BG00A02.2	Incorrect Initial PAR For VX Fire	BGAD Commander PDS Supervisor	January 2001
<p>CORRECTIVE ACTION/COMMENT: The corrective action will be to make the PAR based on the M55 GB Rocket Igloo. This lesson learned will be added to our EOC training to prevent future mistakes of this nature.</p> <p>Areas needing improvement (check all that apply):</p> <p> <input type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input checked="" type="checkbox"/> Procedures </p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
BG00A03.1	Failure To Recommend Shelter-In-Place (SIP) For Madison County Zone 1B And 1C	BGAD Commander BGCA Commander Director For Operations	January 2001
<p>CORRECTIVE ACTION/COMMENT: The shelter-in-place option will be considered as the PAR when VX deposition plume tip arrives before evacuation can be initiated. The Commander or designated representative will make the PAR based on the best information available.</p> <p>Areas needing improvement (check all that apply):</p> <p> <input checked="" type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input checked="" type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input checked="" type="checkbox"/> Procedures </p>			

FINDING		RESPONSIBLE FOR	COMPLETION
---------	--	-----------------	------------

NUMBER	SHORT TITLE	CORRECTION	DATE
BG00A13.1	Personal Mask Removal At The PDS	BGAD Commander PDS Supervisor	January 2001
<p>CORRECTIVE ACTION/COMMENT: We didn't use the M8 alarm or other gross level monitoring, however decontamination was conducted in accordance with established procedures. Additionally, regardless of presence of monitoring, operating personnel on the cold side of the CCL will remain masked as a precautionary measure.</p> <p>Areas needing improvement (check all that apply):</p> <p> <input type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input checked="" type="checkbox"/> Procedures </p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
BG00A13.2	Personal Protective Equipment For Fire Department Personnel	BGAD Commander Chief, BGAD Fire Dept.	January 2001
<p>CORRECTIVE ACTION/COMMENT: The CAIRA Plan needs to be revised to state "The Fire Department personnel shall dress in appropriate level of dress as determined by the Senior Firefighter present." This will allow for the flexibility of the Fire Departments responsibility in a CAIRA Accident/Incident.</p> <p>Areas needing improvement (check all that apply):</p> <p> <input type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input checked="" type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input type="checkbox"/> Procedures </p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
----------------	-------------	----------------------------	-----------------

BG00A13.3	Gross Level Detection Tests/Checks	BGAD Commander PDS Supervisor	January 2001
<p>CORRECTIVE ACTION/COMMENT: Set up and operation of M8 alarm will be a follow-up objective of PDS training. We will exercise this during our next CAIRA training.</p> <p>Areas needing improvement (check all that apply):</p> <p><input checked="" type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input type="checkbox"/> Procedures</p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
<del>BG99A10.1</del> CLOSED	CPR Training For PDS Personnel	BGAD Commander	30 Nov 1999
<p>CORRECTIVE ACTION/COMMENT: CPR Training was conducted at the Blue Grass Army Depot on 30 November 1999. The PDS Personnel were in attendance for this training</p> <p>Areas needing improvement (check all that apply):</p> <p><input checked="" type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input type="checkbox"/> Procedures</p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
<del>BG99A13.1</del>	No Detailed Emergency	BGAD Commander	January 2001

BG00A13.4	Entry and Exit Procedures	BGCA Commander	
<p>CORRECTIVE ACTION/COMMENT: Will institute Emergency Entry and Exit written procedures to ensure security force personnel can positively identify members of emergency response teams.</p> <p>Areas needing improvement (check all that apply):</p> <p><input checked="" type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input checked="" type="checkbox"/> Procedures</p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
<del>BG99A13.2</del> CLOSED	Loss of Accountability Of Personnel	BGAD Commander Chief Security Division	March 2000
<p>CORRECTIVE ACTION/COMMENT: Will institute procedures to specify how security personnel will maintain an accurate count of personnel in the restricted areas under emergency conditions.</p> <p>Areas needing improvement (check all that apply):</p> <p><input checked="" type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input checked="" type="checkbox"/> Procedures</p>			

**ACTION PLAN FOR BLUE GRASS COMMUNITY**  
**Blue Grass CSEPP EX 00**  
**(October 25, 2000)**

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
<del>BC99B01.1</del> CLOSED	Depot Siren System Activation	BGAD Commander BGCA Commander Madison County EMA	January 2000
<p>CORRECTIVE ACTION/COMMENT: BGAD, BGCA, and Madison County EMA are working together to resolve this issue. BGAD/BGCA will receive a computer system with software from Madison County, which will give BGAD/BGCA the capability to activate the siren system. BGAD/BGCA will also construct a MOA / MOU with Madison County on when the Depot should activate the sirens.</p> <p>Areas needing improvement (check all that apply):</p> <p> <input type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input checked="" type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input checked="" type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input checked="" type="checkbox"/> Procedures </p>			

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
<del>BC99B03.1</del> CLOSED	Protective Action Recommendation (PAR) Incomplete	BGCA Commander Dir. For Operations	04 November 99
<p>CORRECTIVE ACTION/COMMENT: Impacted zones, which consist of Estill, Clark, Powell, Jackson, Rockcastle, Garrard, and Fayette Counties have been programmed into the hazard analysts' D2PC computer.</p> <p>Areas needing improvement (check all that apply):</p> <p> <input type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input type="checkbox"/> Procedures </p>			

**ACTION PLAN FOR GARRARD COUNTY**  
**Blue Grass CSEPP EX 00**  
**(October 25, 2000)**

FINDING NUMBER	SHORT TITLE	RESPONSIBLE FOR CORRECTION	COMPLETION DATE
GR00C03.1	Information Was Not Recorded on the Initial Notification Form	Garrard County CSEPP Coordinator	October 2001
<p>CORRECTIVE ACTION/COMMENT: Garrard County Dispatch staff will receive additional training on the correct use of the BGANS notification form. The CSEPP County CSEPP Coordinator will arrange for two test drills to be conducted with Garrard County Dispatch to insure that proper protocol will be followed.</p> <p>Areas needing improvement (check all that apply):</p> <p><input checked="" type="checkbox"/> Training    <input type="checkbox"/> Facilities    <input type="checkbox"/> Plan(s)    <input type="checkbox"/> Other  <input type="checkbox"/> Equipment    <input type="checkbox"/> Staffing    <input type="checkbox"/> Procedures</p>			

**BLUE GRASS COMMUNITY CSEPP EXERCISE 2000  
(Blue Grass CSEPP EX 00)**

**EXERCISE REPORT**

**APPENDIX 2: SERVICE RESPONSE FORCE**

As a result of the fire in igloo F-606, the Initial Response Force (IRF) commander requested Service Response Force (SRF). The SBCCOM Commanding Officer became the SRF Commander.

The SRF arrived at the Blue Grass Army Depot at 1600 hours, October 25, 2000. The SRF received a transition briefing from the IRF staff and immediately augmented and integrated with the IRF. The SRF Commander, also designated as the Federal On-Scene Coordinator, attended a press conference at 1830 hours, October 25, 2000. The press conference was coordinated with Madison County and Commonwealth of Kentucky officials.

The SRFX continued on October 26 and 27, 2000. The SRF worked closely with the Federal Response Center (FRC) on issues of recovery, monitoring and re-entry. The SRFX included participants from the Environmental Protection Agency (EPA) Region IV; Federal Emergency Management Agency (FEMA Region IV); Department of Agriculture (USDA); Commonwealth of Kentucky Environmental Response Team (ERT); Commonwealth of Kentucky Department of Emergency Management; Madison County; Clark County, Estill County, Lexington-Fayette County Urban Government; and the city of Richmond.

This Page Intentionally Left Blank

**BLUE GRASS COMMUNITY CSEPP EXERCISE 2000  
(Blue Grass CSEPP EX 00)**

**EXERCISE REPORT**

**APPENDIX 3. ACRONYMS and ABBREVIATION**

ACP.....	Access Control Point
AMC .....	Army Material Command
AOC .....	Army Operations Center
ARC .....	American Red Cross
ARES .....	Amateur Radio Emergency Service
BGAD .....	Blue Grass Army Depot
BGANS.....	Blue Grass Alert and Notification System
BGCA .....	Blue Grass Chemical Activity
CAI.....	Chemical Accident/Incident
CAIRA .....	Chemical Accident/Incident Response and Assistance
CCL.....	Contamination Control Line
CLA.....	Chemical Limited Area
CONUS.....	Continental United States
COSIN.....	Control Staff Instruction
CP.....	Command Post
CPR.....	Cardio-Pulmonary Resuscitation
CSEPP.....	Chemical Stockpile Emergency Preparedness Program
D2PC.....	Computer Model for Chemical Hazard Dispersion
DA PAM.....	Department of the Army Pamphlet
DA.....	Department of the Army
DCP.....	Disaster Control Plan
DEEM .....	Department of Environmental Emergency Management
DEM.....	Department of Emergency Management
DSN.....	Defense Switched Network
EAS.....	Emergency Alert System (formerly Emergency Broadcast System)
EBS .....	Emergency Broadcast System
ED .....	Emergency Department
EDT.....	Eastern Daylight Time
EEI .....	Essential Elements of Information
EM.....	Emergency Management
EMD.....	Emergency Management Director
EMIS.....	Emergency Management Information System
EMS .....	Emergency Medical Services
EMT .....	Emergency Medical Technician
ENDEX.....	End of Exercise

EOC.....Emergency Operating/Operations Center  
 EOF.....Emergency Operating Facility  
 EOP.....Emergency Operations Plan  
 EPZ.....Emergency Planning Zone  
 ESLO.....Emergency Services Liaison Officer  
 EST.....Eastern Standard Time  
 EXPLAN.....Exercise Plan

FAX.....Facsimile  
 FCP.....Field/Forward Command Post  
 FEMA.....Federal Emergency Management Agency  
 FEMIS.....Federal Emergency Management Information System  
 FRC.....Federal Response Center  
 FSX.....Full-Scale Exercise

IP.....Implementing Procedure  
 IRF.....Initial Response Force  
 IRFC.....Initial Response Force Commander  
 IRFX.....Initial Response Force Exercise  
 IRZ.....Immediate Response Zone

JIC.....Joint Information Center  
 JIS.....Joint Information System

KY.....Commonwealth of Kentucky  
 KY DES.....Kentucky Division of Emergency Services  
 KyEM.....Kentucky Emergency Management

LFUCG.....Lexington-Fayette Urban County Government  
 LSC.....Logistical Support Center

MACOM.....Major Command  
 MCE.....Maximum Credible Event  
 MCP.....Mobile Command Post  
 MOA.....Memorandum of Agreement  
 MOU.....Memorandum of Understanding  
 MSEL.....Master Scenario Events List  
 MPDS.....Mobil Personnel Decontamination Station

NAWAS.....National Warning System  
 NLT.....No Later Than  
 NRC.....National Response Center  
 NWS.....National Weather Service

OCP.....Operational Control Point

OSC.....On-Scene Coordinator  
 PA .....Public Alerting (System)  
 PAD.....Protective Action Decision  
 PAO.....Public Affairs Officer  
 PAR.....Protective Action Recommendation  
 PAZ.....Protective Acton Zone  
 PDS .....Personnel Decontamination Station  
 PIO .....Public Information Officer  
 POR.....Point of Review  
 PPE.....Personal Protective Equipment  
  
 RACES.....Radio Amateur Civil Emergency Service  
 RRT.....Regional Response Team  
 RTAP .....Real Time Analysis Platform  
  
 SBCCOM.....Soldier and Biological Chemical Command  
 SCBA .....Self Contained Breathing Apparatus  
 SEOC .....State Emergency Operations Center  
 SIMCELL .....Simulation Cell  
 SOP .....Standard Operating Procedures  
 SRF .....Service Response Force  
 SRFC.....Service Response Force Commander  
 SSCC.....Site Security Control Center  
 STARTEX.....Start of Exercise  
  
 TAR.....Tone Alert Radio  
 TBD.....To Be Determined  
 TCM.....Toxic Chemical Munitions  
 TCP .....Traffic Control Point  
 VIP .....Very Important Person

**BLUE GRASS COMMUNITY TWO-LETTER IDENTIFIER CODES:**

BG..... BGAD  
 KY..... Commonwealth of Kentucky  
 LF..... Lexington-Fayette Urban County Government  
 BC..... Blue Grass Community  
 LA..... Laurel County  
 CK..... Clark County  
 JA..... Jackson County  
 ES..... Estill County  
 RO..... Rockcastle County  
 GR..... Garrard County  
 MC..... Madison County  
 PO..... Powell County

This Page Intentionally Left Blank.

**BLUE GRASS COMMUNITY CSEPP EXERCISE 2000  
(Blue Grass CSEPP EX 00)**

**EXERCISE REPORT**

**APPENDIX 4: DISTRIBUTION**

<u>Address</u>	<u>(N. of Copies)</u>
Federal Emergency Management Agency ATTN: PT-CR-CS (Mr. Ronald Barker) 500 C Street SW, Room 621 Washington, DC 20472	5
FEMA Region IV ATTN: R4-PT-PE (Mr. Dave Wilson) 3003 Chamblee-Tucker Rd Atlanta, GA 30341	3 1 Disk Copy
CDR USA SBCCOM ATTN: AMSSB – OCS (Mr. John Gray) 5183 Blackhawk Road APG, MD 21010-5424	3
Commander, Blue Grass Chemical Activity ATTN: AMSSB-OBG-CO (Mr. Mike McAlister) 2901 Kingston Highway Richmond, KY 40475-5008	20
Commonwealth of Kentucky Disaster and Emergency Services CSEPP ATTN: Mr. Charles Scott 1117 U.S. 60 West Frankfort, KY 40601	5
Madison County Emergency Management Agency ATTN: Mr. Don Broughton 560 S. Keeneland Richmond, KY 40475	2
Clark County Disaster and Emergency Services Winchester Police Dept. ATTN: Mr. Gary Epperson 16 South Maple St. P.O. Box 40 Winchester, KY 40392-0040	2

<u>Address</u>	<u>(N. of Copies)</u>
Estill County Emergency Management Agency ATTN: Mr. Fred Rogers 142 Broadway Irvin, KY 40336	2
Garrard County Disaster and Emergency Services ATTN: Mr. Dewayne Nave 101 Stanford Street Lancaster, KY 40444	2
Jackson County Disaster and Emergency Services ATTN: Mr. Bill Gay City Building, US 421 & State Rt. 89 Intersection P.O. Box 455 McKee, KY 40447	2
Lexington-Fayette Urban County Government Division of Environmental and Emergency Management (DEEM) ATTN: Mrs. Louise Caldwell-Grant 121 North Martin Luther King Blvd. Lexington, KY 40507	2
Laurel County Disaster and Emergency Services ATTN: Mr. Brian Reams 501 S. Main Street London, KY 80741	2
Powell County Emergency Operations Center Disaster and Emergency Services ATTN: Mr. J.L. Bowen 56 Atkinson St. Stanton, KY 40380	2
Rockcastle County Disaster and Emergency Services Rockcastle County Courthouse ATTN: Bonnie Roark 205 E. Main Street Mt. Vernon, KY 40456	2
Director, AMC Surety Field Activity ATTN: AMXSA (Mr. Roy Jorgensen) Building E-5101 Aberdeen Proving Ground, MD 21010	1

**Address**

**(N. of Copies)**

U.S. Army Soldier Biological and Chemical Command  
ATTN: AMSCB Ken Boyd  
Bldg. E5101  
5183 Blackhawk Road  
Aberdeen Proving Ground, MD 21010-5423

1  
1 Disk Copy

Director, USANCA  
ATTN: MONA-OP  
5100 Heller Loop, Suite 101  
Springfield, VA 22150

1

Director  
U.S. Army Defense Ammunition Center and School  
ATTN: SIOAC-ASP  
Savanna, IL 61074-9639

1

Commander, Anniston Chemical Activity  
ATTN: SCBAN (Mr. Don Brodersen)  
7 Frankford Rd, Bldg 363  
Anniston, AL 36201-4199

1

Commander, Edgewood Chemical Activity  
ATTN: SCBAB-CO (Ms. Linda Nogle)  
Bldg. 314  
Aberdeen Proving Ground, MD 20005

1

Commander, Newport Chemical Depot  
ATTN: SCBNE (Mr. Doug Stroud)  
P.O. Box 121  
Newport, IN 47966-0121

1

Commander, Pine Bluff Chemical Activity  
ATTN: SCBPB-SRC (Mr. Butch Reeves)  
10020 Kabrich Circle  
Pine Bluff, AR 71602-9500

1

Commander, Pueblo Chemical Depot  
ATTN: SCBPU (Mr. Doug Davis)  
Pueblo, CO 81001-5000

1

Commander, Deseret Chemical Depot  
ATTN: SCBTO (Mr. Jim Miller)  
Tooele, UT 84074-5000

1

**Address**

**(N. of Copies)**

Commander, Umatilla Chemical Depot ATTN: SCBUL Hermiston, OR 97838	1
FEMA Region III ATTN: R3-PT-TE (Mr. Landton Malone) Liberty Square Building 105 South 7 <sup>th</sup> Street Philadelphia, PA 19106	1
FEMA Region V ATTN: R5-PT-PE (Ms. Deborah Wagner) 536 South Clark St. 6 <sup>th</sup> Floor Chicago, IL 60605	1
FEMA Region VI ATTN: R6-PT-TE (Ms. Lisa Hammond) Federal Regional Center 800 North Loop 288 Denton, TX 76201-3699	1
FEMA Region VIII ATTN: R8-PT-CS (Mr. Steve Reaves) Denver Federal Center, Building 710 P.O. Box 25267 Denver, CO 80225-0267	1
FEMA Region X Federal Regional Center ATTN: R10-PT-TE (Mr. Larry Keen) 130 228 <sup>th</sup> Street, SW Bothell, WA 99021-9796	1
Argonne National Laboratory ATTN: Mr. Jacques Mitrani Building 900/DIS 1200 International Parkway Woodridge, IL 60517	1

Innovative Emergency Management, Inc.  
ATTN: Mr. Jack Long  
35 Kensington  
Abingdon, MD 21009

1

—

**Total**

**72**

This Page Intentionally Left Blank.