TAB Q-7-___

COVERED FACILITIES

FACILITY NAME	FAC EMERG RESP COORD	COMMUNICATIONS
StCity	Title	Office# Home# R. Freq Pager #
	ALTERNATE FAC EMERG RESP COORD	
	Title	Office # Home # R.Freq

HAZARDOUS CHEMICAL(S)

NAME UN ID# FORM PACKAGED MAXIMUM HEALTH CAS # CONTAINER QUANTITY RISK

SKETCH OF FACILITY AND STORAGE AREAS

STAGING AREA (Support units will report and await assignment by local organization)	 						
			report	and	await	assignment	p2

TRANSPORTATION ROUTES AND MODES OF TRANSPORTATION (Include s	
plier and telephone numberdescribe how chemicals are handle list hazardous points along the routes)	30
Tist Mazardous points drong the routes,	
	_
	<u> — </u>
<u> </u>	<u>-</u>
	_
SPECIAL FACILITIES LIKELY TO BE AFFECTED BY A RELEASE (List	af-
fected facilities and day/night contacts)	
	—
	_
PROTECTIVE ACTIONS (In-place sheltering or evacuationgive br	ief
description of area(s) where protective actions may requiredadd evacuation procedures to An	pe
requiredadd evacuation procedures to And	nex -
EE)	—
PARTICIPATE ON UNITED ATTING (EVERCICING	
EMERGENCY EQUIPMENT ON HAND/TRAINING/EXERCISING	
	
	— <u>-</u>
SPILL CONTAINMENT/CLEAN-UP/DISPOSAL	
SPILL CONTAINERNI/ CLEAN-OF/ DISTOSAL	<u>-</u>

EMERGENCY NOTIFICATION

Local	24 hr. warn	ing number	(LEPC)_				
	Haz-mat Co	oord. (Day)_ (Night)_		or or			
	Alt. Coord.	(Day)_ (Night)_		or or		_ - _	
		·-	Fire	Dept			
			_Police	Dept			_
	DES Coord.	(Day) (Night)		or _			-
		Rescue		or _			
-		Ambulance		or _			_
Kentuc	cky Emergenc	y Response	Commissi	on (KER	C) 50	2-564	-7815
Kentuc	cky DES Area	Coordinato	r		(H) _		
Nat. F	Resources &	Envir. Prot	. Cabine	t (NR&E	PC) 5	02-564	4-2380
Nation	nal Response	Center (NR	C)		1-8	00-424	4-8802
Hours:	Prot. Agen 8:30 a.m. Hing Federal	- 7:30 p.m.	tline , MonF	ri.,	1-8	00-53	5-0202
Chemtr	rec				1-8	00-424	4-9300

APPENDIX Q-8

CHEMICAL STOCKPILE EMERGENCY PREPAREDNESS PROGRAM (CSEPP)

I. PURPOSE

The purpose of this appendix is to afford a hazard-specific emergency response plan that will provide maximum protection for the lives and property of the citizens of the Commonwealth of Kentucky in the event of a release of chemical agents stored at Bluegrass Army Depot (BGAD) in Madison County. It is written to be compatible with hazard-specific plans in place at BGAD, Madison County Annex GG, and the plans in place for Clark, Estill, Fayette, Garrard, Powell, Jackson, and Rockcastle counties.

II. AUTHORITY

The authority for the CSEPP specific appendix is as follows:

Kentucky Revised Statute, Chapter 39, as amended 1990.

Public Law 91-606 (Disaster Relief Act of 1970), as amended.

Public Law 81-920 (Federal Civil Defense Act of 1950), as amended.

Public Law 93-288 (Disaster Relief Act of 1974), as amended.

National Defense Authorization Act of 1986, Public Law 99-145, as amended.

National Defense Appropriations Act of 1988, Public Law 100-180, as amended.

Memorandum of Understanding, Federal Emergency Management Agency and Department of Army, August 3, 1988.

III. SITUATIONS AND ASSUMPTIONS

A. SITUATION

1. The Chemical Stockpile Emergency Preparedness Program (CSEPP) was developed to maximize protection of the civilian population through augmentation of existing capabilities for impacted states and local jurisdictions. The program is overseen by a joint Army/FEMA Steering Committee. The Kentucky Division of Disaster and Emergency Services (KyDES) serves as the coordinating agency for CSEPP in Kentucky.

B. BACKGROUND

1. In December, 1985, Congress directed the Department of the Defense to dispose of lethal unitary chemical agents and munitions by September 30, 1994. The deadline was later extended to 2004.

- 2. A Memorandum of Understanding (MOU) between the Department of the Army (DA) and the Federal Emergency Management Agency (FEMA) was created in August 1988 whereby FEMA assumed responsibility for off-post emergency planning activities.
- 3. BGAD is located in Madison County, southeast of Richmond, and is a storage facility for various types of munitions. Some of the munitions contain toxic chemical agents. There are two basic types of agents at BGAD: blister agents, commonly referred to as Mustard Agents (H), and Nerve Agents (GB & VX). Due to the physical characteristics of the agents, type GB presents the most threat to life in the event of a chemical incident resulting in a release of agent into the environment.
- 4. Actions to be taken in this plan are of a protective and defensive nature.
- 5. A release could affect portions of, or all of Madison County, and/or portions of several counties which border Madison County.
- 6. Offensive actions, for mitigation and containment responses, are the sole responsibility of BGAD and the Army. Toxic chemicals in storage at BGAD are secured in concrete "igloos" that are designed to minimize the effects of any explosion that could occur, and to contain spills or leakage of agent.
- 7. Although the actual levels and sizes of stockpiles throughout the U.S. are generally classified for reasons of national security, the information on distribution is available, with BGAD storing 1.6% of the nation's stockpile based on weight by tonnage.
- 8. Nationally, the chemical agents are stored in three basic configurations: (1) projectiles, cartridges, mines and rockets containing propellant and/or explosive components; (2) aircraft delivered munitions that do not contain explosive components; and (3) steel one-ton containers. BGAD's stored munitions consist of the rockets and munitions: 155 MM projectiles containing H or VX, 8-inch projectiles containing GB, M-55 rockets containing GB or VX, and one, one-ton container of GB.
- 9. Potential causes of a release of toxic chemicals include the rupture of containers, or a detonation of munitions that could result in the escape of the agents. The rate at which the chemicals would disperse into the environment, in the event of a release, is based on meteorological conditions at the onset of the incident, duration of the release, and the type and amount of the agent released.
- 10. Effective emergency response planning related to CSEPP requires an adequate knowledge of the chemical agents involved and how the toxicity and physical characteristics of each agent are pertinent to emergency planning. This document describes properties of chemical agents, toxicity, public health impacts, and environmental impacts.

C. ASSUMPTIONS

- 1. On the basis of studies by the Army and current data, it is assumed that no liquid contamination, but only a vapor, can escape the post. Since this vapor is colorless and odorless, and detection of contamination by exposure to a vapor would be primarily through observation of symptoms, evacuation is the preferred method for dealing with an escape of the chemical. Accidents involving explosions, fires, and/or spills, could have environmental consequences of major proportions, including human fatalities, destruction of wildlife and wildlife habitat, destruction of economic resources and water supplies, and degradation of life in the affected areas. Nevertheless, such high-consequence accidents have extremely low probabilities of occurrence.
- 2. Direct interaction with the chemical agent is the responsibility of the personnel at BGAD, who have the training and equipment to directly intervene in the event of a release of toxic agent.
- 3. At all Emergency Classification Levels (ECLs), BGAD will notify the State EOC and the Madison County EOC. Madison County will, in turn, notify the alternate Madison County EOC, located in Berea.
- 4. The duty officer at the State EOC will further disseminate the notification to the PAZ counties of Clark, Estill, Garrard, Powell, Jackson, and Rockcastle. He or she will also notify the host county of Fayette, and Kentucky State Police (KSP) Post #7 in Richmond. He or she will use the most rapid and efficient means available, to include radio, telefacsimile, or telephone.
- 5. Key emergency management officials in each jurisdiction will work together to form an EOC policy group to implement decisions based on the best available information, and to coordinate and control the necessary emergency functions within their counties. (Refer to Annex A, Direction and Control, of the Ky EOP)
- 6. The selection of the appropriate protective action by Madison County and the PAZ counties will be based on pre-scripted recommendations from BGAD and/or KyDES. Implementation of selected protective measures will reflect meteorological conditions to determine those zones AT-RISK, and will, at a minimum, be implemented for a 90 degree segment of the areas AT-RISK, to assure that minor changes in wind direction will not require significant changes in the protective action strategy. Areas AT-RISK are those geographic locations which might be affected by the plume path generated by a chemical release.
- 7. In the event of a release, persons living within approximately 10 kilometers (6.2 miles) from the center of the chemical exclusion area would be the first to be affected.
- 8. If in-place protection of the population is recommended for affected areas, expedient materials and supplies will be available in homes, businesses, and special facilities to implement protective action procedures.

- 9. If evacuation of some or all the population in the affected areas is deemed appropriate, adequate transportation will be made available for all transportation-dependent persons. (Refer to Annex EE, Evacuation, of the KyEOP)
- 10. A portion of the population may choose to evacuate before an officially recommended evacuation. The locations, destination, and numbers of these spontaneous evacuees can not be known in advance.
- 11. Should evacuation be the recommended protective action, and time and conditions permit, evacuation resources will be assigned first to those areas AT-RISK. As these zones complete evacuation, resources will be assigned by priority to the closest remaining zones affected, to allow for maximization of resources and to consider possible precautionary evacuation or changes in wind direction.
- 12. When resources of the county or cities within the county have been depleted, additional support will be coordinated through the appropriate agencies at the State EOC. The State will not act in a first responder role, but will work to support Madison County and other counties as needed.
- 13. The U.S. Army will ensure that available services are provided on request to affected communities. These services may include recommendation that reentry is deemed safe for affected areas. It is assumed that these recommendations will be made from BGAD. They may also include detection and decontamination of an agent in off-post areas.
- 14. Citizens will be made familiar with the emergency planning zones based on published information and directions provided for them through a public information and education program in advance of an incident. These may include appropriate protective actions to take when AT-RISK and familiarization with warnings to include EBS, sirens, tone-alert radios, and/or NOAA weather radio messages.
- 15. Fayette, Clark, Garrard, Jackson, Powell, and Rockcastle counties have been designated as host counties to receive evacuees from Madison County.
- 16. No emergency workers are expected to be exposed to toxic concentrations of chemical agents in the performance of duties assigned to them in this plan.

D. HAZARD ANALYSIS

- 1. The Blue Grass Area of BGAD consists of 14,600 acres of land southeast of Richmond. The installation is approximately 40 km (25 miles) south of Lexington, 160 km (100 miles) southeast of Louisville, and 168 km (105 miles) south of Cincinnati, Ohio.
- 2. The chemical storage area and the proposed incinerators of the Chemical Stockpile Disposal Program (CSDP) facility sites are located in the north central part of the installation, approximately 2 km from the installation's border. State Highways 52 and 374 run along the depot's northern and eastern boundaries, respectively.

- 3. The immediate vicinity of BGAD is characterized by moderately rolling terrain. Stronger topographic features located some distance from the installation would significantly affect the dispersion of an accidental release of chemical agent. These features include the Kentucky River and its bluffs, the Red River and its bluffs, and the mountains in the Daniel Boone National Forest. The Kentucky River and associated bluffs are located about 15 to 20 km north of the chemical storage site. These would effectively prevent the dispersion of agent to any points further north and cause the agent to move up or down the river valley. To a lesser extent, the Red River and its smaller bluffs, located about 20 km to the northeast and east, would cause the agent to move up or down the valley.
- 4. The mountains of the Daniel Boone National Forest, located about 15 to 20 km to the south and southeast, would tend to act as a barrier to the further dispersion of agent to the south and southeast, resulting in the pooling of agent in the foothills area.
- 5. A variety of accidents associated with on-site stockpile disposal can occur. They can occur at a chemical weapons storage building/igloo, at the incinerator plant site, or in transit. Modes of release include explosions or detonations that cause agent to aerosolize virtually instantaneously into small particles, fires that vaporize agent on a semi-continuous basis, spills which cause agents to evaporate, or some combination resulting in a complex release. Furthermore, releases can be of a short duration, which results in a discrete puff or cloud which moves downwind, or of long duration, which results in a plume extending downwind over a longer time.
- 6. The primary factors that affect dispersion are wind direction, wind speed and atmospheric stability. Wind direction determines which areas are downwind of the release and can be expected to be contaminated. Wind speed is critically important because it determines the time for a given release to reach a specified downwind distance and also affects the distances/dosages resulting from a particular release. Atmospheric stability provides an estimate of the amount of the mixing that affects downwind distance and doses. In addition, air temperature is a factor in determining plume rise and, for evaporative releases, the rate of volatilization. Accident scenario descriptions for storage and handling activities at BGAD are as follows:
 - a. Drop of munition(s) leads to detonation.
 - b. Collision accident with prolonged fire.
 - c. Munition pallet dropped during pallet inspection; detonation occurs.
 - d. Severe earthquake leads to munition detonation.
 - e. Munition dropped during leaker isolation, munition detonates.
- Scenario descriptions for accidents during on-site disposal activities are as follows:
 - a. Drop of munition pallet between the munition handling igloo (MHI) and munitions demilitarization building (MDB) leads to detonation.

- b. Drop of bare single munition inside the MDB leads to detonation.
- c. Drop of bare palletized munition leads to detonation.
- d. Fork-lift collision accident at storage area leads to detonation of burstered munition.
- e. Earthquake damages the MDB; munitions are intact; fire occurs; fire suppression system fails.
- f. Earthquake causes munitions to fall but no detonation occurs, the MDB is intact, the toxic cubicle (TOX) is intact; earthquake also initiates fire, fire suppression system fails.
- g. Munition detonation in explosive containment room (ECR) causes structure and ventilation failure.
- h. Munition in ECR causes structural failure, a fire, and ventilation failure.
- i. A burstered munition is fed to the dunnage incinerator (DUN).
- j. A munitions vehicle accident with fire occurs, causing detonation of burstered munitions. Ignition of the propellant by a probe could also detonate the burster of a cartridge, and the burster of a rocket could be detonated by impact-induced ignition of the rocket propellant.
- 8. Under worst-case meteorological conditions, it will take approximately one (1) hour for the hazardous plume to reach the outer boundary of the area designated as the IRZ, and extend into the PAZ.
- 9. Areas AT-RISK would take protective actions based on recommendations from BGAD, determined by their geographic locations, wind direction or other meteorological conditions that could affect the plume (a vapor of the released agent and its deposition), and the amount and duration of the release. These actions are either in-place protection or evacuation. (TAB Q-8-1 describes in-place protective measures)

a. PHYSICAL AND CHEMICAL PROPERTIES

All the agents are liquids at normal indoor temperatures, although the mustards (H) freeze at ambient temperatures below 13 to 15 degrees C (55 to 59 degrees F). The mustard agents have relatively high boiling points of 215 to 217 degrees C (419 to 423 degrees F) but have significant vapor pressures at ambient temperatures. Therefore, mustard poses an inhalation hazard at higher ambient temperatures.

b. PUBLIC HEALTH IMPACTS

1) If chemical agents are released, severe human health effects could result. The magnitude of the impact would depend on a number of variables: the amount of and type agent released; the method of release (e.g., spill, explosion, etc.); meteorological conditions; the number of unprotected people potentially exposed to the agent(s); distance from the chemical event site to the unprotected in-

dividuals; age; gender; and health of the exposed populations; route and duration of exposure; and timeliness of medical treatment.

c. MEDICAL CHEMICAL AGENT INFORMATION

1) Nerve Agents:

- (a) Nerve agents GB and VX are organophosphate chemical compounds. These chemical agents are very similar to common insecticides such as Malathion or Diazinon, which are also organphosphates. Agents GB and VX are several hundred times as potent as the common insecticides mentioned above.
- (b) Nerve agents produce biological effects primarily by inhibiting the enzyme cholinesterase. Cholinesterase can be found in somewhat different forms throughout the body. This enzyme is present in red blood cells and in other tissues. Blood cholinesterase can be measured in the laboratory to determine a baseline before possible exposure to organophosphate compounds. After exposure is suspected, the cholinesterase level at that time can be compared to the baseline, proving or disproving exposure.
- (c) The inhibition of the enzyme cholinesterase works in the following manner. The neurotransmitter acetycholine is released presynaptically by a nerve when depolarized; it stimulates the postsynaptic receptor site on an end organ, causes activity in the end organ and is hydrolyzed by tissue cholinesterase. The end organ macy be striated (voluntary) muscle, smooth (involuntary) muscle, a gland, or another nerve.
- (d) Failure of cholinesterase to hydrolyze acetycholine, as occurs when the enzyme is inhibited by a nerve agent, results in repeated stimulation of the end organ by the neurotransmitter.
- (e) Poisoning by a cholinesterase inhibitor is basically poisoning by unhydrolyzed endogenous achetocholine. This causes hyperactivity of muscles until they become fatigued and flaccid, a large outpouring of fluids by glands and hyperactivity of the central nervous system.
- (f) There are two basic ways to receive nerve agent exposure: inhalation of vapor, and skin absorption. Ingestion is a third way to receive exposure, but this route is not as likely as the other methods. It should be noted that ingestion is a possibility in some cases and should be considered.

- (g) Exposure of unprotected individuals to small amounts of nerve agent vapor causes symptoms that appear in the eyes and nose. Myosis (pinpointing of the pupils) develops within seconds to minutes of exposure. Dimness and blurred vision, as well as eye pain soon follows. Slightly more agent exposure causes rhinorrhea (runny noses). The flow of fluid from the nose may be very heavy in quantity and nature.
- (h) As the exposure progresses, the bronchi and bronchioles of the lungs will constrict, causing tightness of the chest and difficulty in breathing. As agent absorption by inhalation increases, the casualty will experience a feeling of weakness, vomiting, cramps and diarrhea. If the absorption of agent has been great enough, the casualty's respiratory system will cease to function, resulting in death. In the event of a massive exposure to agent vapor, the casualty will rapidly lose consciousness, convulse, stop breathing and die.
- (i) In treating a chemical agent casualty, the care provider must first remember to decontaminate the casualty. If the provider is not certain that decontamination has been accomplished, he should do so without delay.
- Nerve agent casualties should be treated with two drugs: (j) Atropine and Pralodoxime Chloride. Attropine is an anticholinergic that blocks the effects of the nerve agent. It should be administered only after two or more of the symptoms appear. The recommended starting doses for Atropine is 2 mg, intramuscular (IM) or intravenous (IV). Emergency responders should give no more that 6 mg total without directions from medical authorities. Pralodoxime Chloride (2-PAMCi); protopam (R) is the second useful drug in the treatment of nerve agent casualties. It should be administered in conjunction with Atropine in order to be effec-Recommended dosage is 600 mg, IM. Emergency responders should administer no more than 1800 mg total. A time interval of 5 to 20 minutes should be observed between 600 mg injections.

2) Blister Agents

- (a) The blister agent H causes delayed casualties by liquid and vapor effect on skin and eyes and by vapor effect through the respiratory system. There are no immediate symptoms to exposure to Mustard, showing the insidiousness of the agent. This agent has a cumulative effect on the body. Small repeat exposures to Mustard over a period of time can cause disability or death.
- (b) Exposure to minute quantities for up to one hour does not have a significant effect on the skin or respiratory tract. Within 8 to 12 hours, this same exposure causes lacrimation and a sense of sand in the eyes. As the agent concentration

increases, corneal damage to the eyes will result. The effects on the skin and respiratory system, depending on agent concentration, show within 4 to 12 hours. The effects on the respiratory system is slow to fully develop and may not reach maximum severity for several days.

- (c) In treating a Mustard casualty, the care provider must be certain that the victim has been decontaminated.
- (d) Treatment is as with burns, but blisters should be opened, using caution not to contaminate the skin, and treated with saline, and antibacterials as needed.

d. ENVIRONMENTAL IMPACTS

- In addition to the concern over acute and chronic human health effects, emergency response planning must consider impacts on the environment, drinking water sources, food supplies, and other natural resources. Additionally, environmental contamination will affect re-entry of evacuated personnel after termination of the immediate airborne health hazard.
- 2) The data on persistence of chemical agents clearly indicate the need for concern about potential effects on water supplies. In addition to the potential for water contamination from the primary agents, there is also potential for contamination by toxic decomposition products. Contamination of surface water bodies used as public water supplies would be of immediate concern. Groundwater supplies could also be affected, if the agents migrate into the substrata.
- 3) Chemical agent contamination of land surfaces poses a threat of food chain contamination and bioaccumulation and serves as a direct exposure pathway for humans and animals. VX can also be absorbed in undegraded form by plants. Animal toxicity can be expected from ingestion of food items contaminated by chemical warfare agents.

e. CHEMICAL ACCIDENT AND INCIDENT RESPONSE ASSISTANCE (CAIRA)

- 1) To be effective, an off-post emergency response program must complement the associated on-post program.
- 2) Local emergency management officials and emergency services providers must be aware of the actions that will be taken by the Army installation and understand how those actions relate to the responsibilities of their own organizations. The on-post response is guided by the CAIRA Operations document, DA PAMPHLET 50-6, which describes the Army's functions, responsibilities, organization, and procedures for responding to chemical events.

- 3) The Department of the Army's (DA) CAIRA effort includes those actions taken to save life, preserve health and safety, prevent further environmental damage, protect property, secure the chemical agents, and maintain public confidence in the Army's ability to coordinate off-post and on-post emergency preparedness and response.
- 4) CAIRA policy and guidance address the federal emergency response to a chemical surety emergency. This response effort includes some key off-post concerns such as public information, event classification, emergency notification, and coordination of response activities.

f. EMERGENCY PLANNING ZONES

- 1) This response plan must reflect the fact that a release of chemical agent will affect different areas in different ways and at different times. Areas near the point of release are likely to experience relatively high concentrations of agent very quickly, while areas further away are likely to experience lower concentrations after a longer time. Consequently, there are differences in the response actions that are appropriate for the different areas and in the time available to implement those actions.
- 2) This section describes a method of dealing with these area-based differences in the emergency planning phase. This section also describes the concept of emergency planning zones (EPZs). It provides guidance on how the zones should be defined and what types of emergency response actions are appropriate for each zone.
- 3) In general, the likelihood of being exposed to a chemical agent from a release decreases as the distance from the point of release increases. In addition, the extent of the exposure also decreases with distance as the concentration of the agent becomes lower.
- 4) Since it is not practical to develop emergency response plans that vary continuously with distance, it is necessary to establish zones to differentiate levels of response needed. For CSEPP, the EPZ concept involves three concentric zones. This concept reflects the differing response requirements associated with a fast-breaking chemical event with limited time for warning and response.
 - (a) The innermost planning zone is the Immediate Response Zone (IRZ), the middle area is the Protective Action Zone (PAZ), and the outermost area is the Precautionary Zone (PZ). For purposes of this document only the IRZ and PAZ are applicable.

(1) IMMEDIATE RESPONSE ZONE (IRZ)

This area extends to approximately 10 to 15 km (6.2 miles) from the chemical event location. This zone is of the utmost concern because a toxic plume of vapor

would reach this zone first and would receive the heaviest concentration of the agent. Persons living in this zone would need very rapid warning and would need to take immediate actions to lessen the adverse actions of the agent(s). The population within the IRZ is approximately 27,400 and includes the City of Richmond.

(2) PROTECTIVE ACTION ZONE (PAZ)

This zone extends beyond the IRZ to approximately 25 km (11 miles) from the chemical event location. The Madison County population of the PAZ is approximately 20,000, and includes the City of Berea. The PAZ is the zone in which public protective actions may still be necessary in the event of an accidental release of chemical agent, but where the available warning and response time are such that most people could be effectively evacuated. The primary response, therefore, is evacuation, because it is anticipated that there would be sufficient time to permit an orderly and complete evacuation.

(3) A description of the IRZ and PAZ boundaries is attached as TAB Q-8-1.

E. SITE METEOROLOGIAL CONDITIONS

- 1. The climate in the BGAD area is characterized as continental, with corresponding wide ranges in temperature. Extreme temperatures above 37 degrees C (100 degrees F) and below -17 degrees C (0 degrees F) occur occasionally but do not last for extended periods of time. In the winter, cold waves from Canada usually are modified somewhat by the time they reach the area. In the summer, periods of warm and humid weather occur when moist air from the Gulf of Mexico moves into the area. Spring and fall are noted for the extreme changes in the weather, often caused by a rapid succession of warm and cold fronts. Precipitation amounts, averaging about 104cm (41 in) per year, are less during the fall than other seasons of the year. Large-scale systems cause much of the precipitation during the fall through the early spring, while thunderstorms produce a large amount of the precipitation during the late spring and summer. The annual probability of a tornado striking BGAD is about 0.0003, or an occurrence of once every 3500 years.
- The prevailing winds are from the south in the BGAD area. This is a consequence of the local topography, which modifies wind direction from the prevailing southwest direction generally found in the central United States.

IV. MISSION

The mission of this appendix to the KyEOP, Annex Q, is to provide a plan by which the citizens in the counties surrounding BGAD will be afforded with maximum protection of lives and property in the event of an accidental chemical release at BGAD.

V. DIRECTION AND CONTROL

- A. State governmental operations will be directed primarily from the EOC in Frankfort. (Refer to Annex A, Direction and Control, of the KyEOP)
- B. Direction and Control at the time of an emergency are the responsibility of KyDES at the State EOC, which will operate in conjunction with the involved county EOCs and BGAD's EOC. Decision-making, administration, coordination of response efforts, communications, and related support operations necessary to the protection of the affected counties are included should there be an accidental chemical agent release at BGAD.
- C. BGAD has the responsibility to notify the State and the Madison County EOCs in the event of an incident. Depot personnel will provide initial guidance and Protective Action Recommendations (PARs) for off-post emergency response. Off-post response is the duty of the IRZ or PAZ county, supported by the appropriate state or federal response assets, as requested by the county.
- D. The Service Response Force will be activated and dispatched to BGAD to assume control over site emergency operations.
- E. The primary off-post command and control center will be the Madison County Emergency Operation Center (EOC) located in Richmond. The Berea EOC will serve as the alternate EOC.
- F. State emergency governmental operations will be carried out from the State EOC located in Frankfort. Should it become necessary, alternate EOCs have been identified for the state. (Refer to Ky EOC SOP)

VI. CONCEPT OF OPERATIONS

A. PHASES OF EMERGENCY MANAGEMENT

1. MITIGATION

- a. Mitigation measures include continued high levels of security and proper procedures for material handling and storage of the chemical agents at BGAD, combined with the efforts of the counties and cities within the counties to educate the public as to the protective actions to be taken in the event of an accidental release of the agent.
- b. Plan maintenance, and a training and exercise program to insure proper functioning of this plan, is necessary to lessen the impact of a chemical event.

2. PREPAREDNESS

a. If a release of toxic chemical agents into the environment occurs, officials in the EOC at BGAD will make prompt notification to the State and Madison County EOCs through direct telephone links. (TBD) Four emergency classification levels (ECLs) will be used to aid in the description of the event and identify the proper action(s) to take.

- b. On-going response training is being conducted for emergency response personnel in the CSEPP area under the auspices of KyDES to bring those responders to a higher level of awareness and capability.
- c. An exercise and training schedule has been developed by the KyCSEPP Training and Exercise Officer. These include courses being developed for CSEPP by FEMA and the State for decision makers and emergency responders.
- d. Involved counties' CSEPP plans and implementing procedures are being developed or updated following a cycle of drills and exercises, incorporating lessons learned and appropriate program guidance, as it is received.

3. RESPONSE:

a. Four levels of emergency classification have been identified in the BGAD CAIRA plan which provide for progressive responses. This appendix to the KyEOP has incorporated these levels in the planning process. Notification and response actions will be based on the emergency classification system and Protective Action Recommendations (PARs) by BGAD officials. These Emergency classification levels are:

1) NON-SURETY EVENT

a) DEFINITION:

Events are likely to occur or have occurred which may be perceived as a chemical surety emergency or that may be of general public interest, but which pose no chemical surety hazard.

b) ACTION:

BGAD will notify the State and Madison County EOCs so that officials may be advised and preparation of press releases can be made if deemed necessary.

2) LIMITED AREA EMERGENCY

a) **DEFINITION:**

Events are likely, or have occurred which involve an actual or potential release with chemical effects expected to be confined to the chemical storage area. This emergency classification level will be declared when the predicted chemical agent plume does not extend beyond the area where the event occurred.

Examples of this are:

(1) A release which does not generate a plume capable of traveling off-site;

- A known or suspected significant compromise of installation security; and
- (3) A non-chemical emergency resulting in a lessened level of site safety, such as a total loss of electric power.

b) ACTION:

BGAD will notify the State and Madison County EOCs of the incident. The KyEOC will notify the PAZ and Host counties through the 24 hour warning points to allow the key officials at each location to be made aware of the situation. However, there is no protective action to be taken, and no public warning will be issued.

3) POST-ONLY EMERGENCY

a) **DEFINITION:**

Events are likely or have occurred which involve an actual or potential chemical agent release with chemical effects beyond the chemical storage area. Releases are not expected to present a danger to persons beyond the Depot boundary. KyDES may elect to partially activate the KyEOC at this ECL.

b) ACTION:

BGAD will notify the State and Madison County EOCs. The KyEOC will notify the PAZ and Host counties through the 24 hour warning points. This will make the local officials aware of the situation so that they can bring their EOCs and emergency responders to a readiness posture. A precautionary evacuation may be recommended, and no public warning will be issued unless there is a precautionary evacuation.

4) COMMUNITY EMERGENCY

a) **DEFINITION:**

Events are likely or have occurred which can be expected to present a danger to the public beyond the boundary of the Depot. This level is declared when the agent plume can be expected to extend beyond the Depot boundary.

Examples of this are:

- An airplane crash into a chemical igloo with a subsequent fire;
- (2) The sudden release of all agent from one or more munitions containing GB outside of an igloo; and