ARMY, MARINE CORPS, NAVY, AIR FORCE

MULTISERVICE TACTICS, TECHNIQUES, AND PROCEDURES FOR NUCLEAR, BIOLOGICAL, AND CHEMICAL ASPECTS OF CONSEQUENCE MANAGEMENT

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MULTISERVICE TACTICS, TECHNIQUES, AND PROCEDURES

FOREWORD

This publication has been prepared under our direction for use by our respective commands and other commands as appropriate.

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PREFACE

1. Scope

This publication is designed for use at the tactical and operational level. It defines the roles of military units and staffs involved in planning and executing integrated military operations other than war (MOOTW) actions/missions in a possible nuclear, biological, and chemical (NBC) environment. This manual provides multiservice tactics, techniques, and procedures (MTTP) on the Department of Defense's (DOD's) role in consequence-management (CM) operations. Congress has determined and the National Command Authority (NCA) has directed that the military become more involved in supporting crisis and CM operations. Acknowledging the services' inherent capabilities for supporting federal, state, and local governments, the Congress has passed numerous laws providing for CM support. These laws also recognize that the National Guard (NG) may provide the initial support when military assistance is required. They also institutionalize interdepartmental and interagency coordination/planning, linking it to the national strategy. The planning and coordination that takes place does so with the realization that the potential NBC environment could be one in which there is deliberate or accidental employment of NBC weapons; deliberate or accidental attacks or contamination with toxic industrial materials (TIM), including toxic industrial chemicals (TIC); or deliberate or accidental attacks or contamination with radiological materials (see Joint Publication [JP] 3-11). Additionally, as coordination and planning is conducted, it is also understood that DOD assets and resources could be used to support a United States Government (USG) CM response to a nuclear, biological, chemical, radiological, or high-yield-explosive incident. Although some of the procedures contained here may apply to man-made disasters, nonterrorist instigated WMD incidents, or nuclear weapons accidents, this MTTP is most readily applied to CM in response to a nuclear, biological, chemical, and radiological (NBCR) (or a chemical biological, and radiological–nuclear [CBR–N]) event.

2. Purpose

This publication provides a reference for mitigating the NBC aspects of CM; bridges the gap between service and joint doctrine; and contains tactics, techniques, and procedures (TTP) for planning and executing NBC operations in MOOTW in support of JP 3-07 and JP 3-07.7. This manual addresses concepts, principles, and fundamentals, to include planning, operational considerations, and training and support functions. It serves as the foundation for developing multiservice manuals and refining existing training support packages (TSPs), mission training plans (MTPs), training-center and unit exercises, and service school curricula. It drives the examination of organizations and materiel developments applicable to military support of CM operations. Further, the TTP in this manual also supports Universal Joint Task List Tasks (UJTL) Strategic National (SN) 8.3.4, Perform Consequence Management in the Interagency Area; Strategic Theater (ST) Task 8.5.4, Coordinate Theater Consequence Management; and Operational (OP) Task 5.7.8, Coordinate Consequence Management in the Joint Operational Area.

3. Application

The audience for this publication is the combatant command (COCOM); the joint task force (JTF); functional and service component staffs in foreign and domestic locations tasked with planning, preparing for, and conducting CM and crisis-management operations. For foreign operations, this MTTP is subject to applicable host-nation (HN) laws and agreements.

4. Implementation Plan

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a. The US Army Chemical School developed this publication with the joint participation of the approving service commands.

b. This publication reflects current service and joint doctrine and command and control (C^2) organizations, facilities, personnel, responsibilities, and procedures. Changes in service protocol, appropriately reflected in service and joint publications, will be incorporated.

c. We encourage recommended changes for improving this publication. Key your comments to the specific page and paragraph and provide a rationale for each recommendation. Send comments and recommendation directly to—

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Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical Aspects of Consequence Management

TABLE OF CONTENTS

Page

EXECUTIVE SUMMARY ..... **x**

PROGRAM PARTICIPANTS ..... **xii**

CHAPTER I **NUCLEAR, BIOLOGICAL, AND CHEMICAL ASPECTS OF CONSEQUENCE MANAGEMENT**
- Background **I-1**
- Environment **I-2**
- Military Role (Domestic Response) **I-7**
- Military Role (Foreign Response) **I-10**
- Response Measures **I-13**

CHAPTER II **COMMAND AND CONTROL**
- Background **II-1**
- Domestic Operations **II-1**
- Foreign Operations **II-4**
- Other Command Considerations **II-5**
- Reporting Requirements **II-7**

CHAPTER III **PLANNING CONSIDERATIONS**
- Planning and Response Concept **III-1**
- Deliberate Planning **III-1**
- Crisis Action Planning **III-3**
- Information Management **III-6**
- Toxic Industrial Materials **III-8**

CHAPTER IV **RESPONSE**
- Background **IV-1**
- Notification **IV-3**
- Common Responsibilities **IV-3**
- Immediate Response **IV-4**
- Critical Response Tasks **IV-4**
- Initial Response **IV-5**
- Response-Execution Considerations **IV-7**

CHAPTER V **RECOVERY, TRANSITION, AND REDEVELOPMENT**
- Background **V-1**
- Recovery Operations **V-1**
- Transition **V-2**

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Redeployment V-3
Documentation V-3

CHAPTER VI **EDUCATION AND TRAINING**
Overview VI-1
Education VI-1
Training VI-2
Exercises VI-3
Simulation and Modeling VI-3
Rules of Engagement VI-3
Public Affairs VI-3

APPENDIX A **CONTAMINATION-AVOIDANCE TACTICS, TECHNIQUES, AND PROCEDURES**
Background A-1
Preparedness A-1
Response Measures A-4
Summary A-6

APPENDIX B **PROTECTION—INDIVIDUAL AND COLLECTIVE**
Individual Protection B-1
Shelter/Protection In Place B-4
Summary B-6
Expedient Actions B-7

APPENDIX C **DECONTAMINATION TACTICS, TECHNIQUES, AND PROCEDURES**
Background C-1
General C-1
Decontamination Basic Concepts C-1
Decontamination Planning C-2
Personnel and Casualty Decontamination-Station Overview C-2
Contamination-Reduction Considerations (Personnel Decontamination-Station Operations) C-4
Decontamination Procedures (Entry Point) (See Figure C-2) C-5
Decontamination Procedures (SCBA Removal) (See Figure C-2) C-6
Decontamination Procedures (Showers) (See Figure C-2) C-6
Decontamination Procedures (Medical Evaluation) (See Figure C-2) C-7
Casualty Decontamination C-7
Casualty Decontamination (Triage Point) (See Figure C-3) C-8
Casualty Decontamination (Emergency-Treatment Area) (See Figure C-3) C-9
Casualty Decontamination (Nonambulatory Decontamination) (See Figure C-3) C-9
Casualty Decontamination (Ambulatory Decontamination) (See Figure C-3) C-11
Casualty Decontamination (Clean Treatment Area) (See Figure C-3) C-12
Casualty Decontamination (Patient Disposition Point)

(See Figure C-3) C-12
Casualty Decontamination (General Patient Decontamination Considerations) C-13

APPENDIX D **DEPARTMENT-OF-DEFENSE RESPONSE AGENCIES**
General D-1
Response Agencies D-1

APPENDIX E **TECHNICAL REACH-BACK CAPABILITIES**
Background E-1
National Response Center (NRC) and Chemical/Biological Hotline (1-800-424-8802) E-1
Defense Threat Reduction Agency (DTRA) E-2
Armed Forces Radiobiology Research Institute (AFRRI) (301) 295-0316 or (301) 295-0530; FAX (301) 295-0227 ..... E-2
US Army Medical Research Institute of Infectious Diseases (USAMRIID) (1-888-USA-RIID) E-3
US Army Medical Research Institute of Chemical Defense (1-800-424-8802) E-3
National Domestic Preparedness Office (NDPO) (202) 324-8186 ..... E-3

APPENDIX F **DEPARTMENT-OF-DEFENSE INSTALLATION FORCE-PROTECTION PLANNING CONSIDERATION**
Background F-1
AT/FP planning process F-1

APPENDIX G **RESPONSE TO TOXIC INDUSTRIAL-MATERIALS EVENTS**
Background G-1
TIM-Operations Planning G-2
TIM Information-Management Resources G-3
Protective-Action-Zones (PAZ) Determination G-4
Vulnerability Mitigation G-6
TIM Precautions G-7
Risk-Management Summary G-9

APPENDIX H **FEDERAL RESPONSE PLAN FOR A TERRORISM-INCIDENT RESPONSE**
Background H-1
Policies H-2
Situation H-3
Concept of Operations H-4
Responsibilities H-11
Funding Guidelines H-15

APPENDIX I **FEDERAL RESPONSE-PLAN SUMMARY FOR EMERGENCY-SUPPORT FUNCTIONS**
Background I-1
Concept of Operations I-2

REFERENCES **References-1**

GLOSSARY **Glossary-1**

INDEX **Index-1**

FIGURES

I-1 Tokyo Nerve-Agent Incident **I-4**
I-2 DOD Response to WMD Incident **I-9**
I-3 CM Foreign Response **I-11**
II-1 JTF-CS C^2 Structure **II-3**
II-2 Notional CM JTF **II-5**
II-3 Components of the ICS **II-7**
IV-1 Graduated-Response Overview **IV-2**
IV-2 Emergency-Department Treatment of Contaminated Patients **IV-11**
B-1 Level A Protection **B-2**
B-2 Level B Protection **B-3**
B-3 Level C Protection **B-4**
B-4 Level D Protection **B-4**
C-1 Establishing Safety Zones at a Hazardous-Materials Incident Scene **C-3**
C-2 Sample Personnel Decontamination-Station Layout **C-4**
C-3 Sample of a Casualty Decontamination Corridor Layout **C-8**
D-1 CB-RRT Capabilities **D-3**
D-2 CBIRF Organizational Structure **D-8**
D-3 CBIRF Incident Site Organization **D-10**
D-4 WMD-CST Organization **D-12**
F-1 AT Planning and Response Elements **F-2**
F-2 AT Planning Considerations (OPLAN Format) **F-6**
H-1 Relationship Between Crisis Management and CM **H-2**
H-2 Relationship Among Federal Agencies Under PDD-39 ..... **H-3**
H-3 Multiagency Crisis-Management Structures **H-6**
H-4 FBI JOC Structure **H-7**
H-5 Preincident CM **H-9**
H-6 Trans-Incident CM **H-10**
H-7 Postincident CM **H-11**
H-8 Relationships Among Federal Plans to Implement PDD-39 ..... **H-14**

TABLES

II-1 ICS and JTF Staff Counterparts **II-6**
B-1 Protection-In-Place Options **B-6**
G-1 Example Hazard-Response Guide (Mixed Load/Unidentified Cargo) **G-5**
I-1 Emergency-Support-Function Designation Matrix **I-5**

EXECUTIVE SUMMARY

Multiservice Tactics, Techniques, and Procedures for Nuclear, Biological, and Chemical (NBC) Aspects of Consequence Management (CM)

Nuclear, Biological, and Chemical Aspects of Consequence Management

Chapter I introduces the definition and purpose of the NBC aspects of CM. It focuses on CM actions taken in response to an NBC incident/accident in a domestic or foreign area that requires the support of US forces. The chapter further outlines that support to civil authorities would be according to applicable federal emergency plans. It concludes with a discussion of the military's role in either a domestic or foreign response.

Command and Control

Chapter II provides a delineation of C^2 responsibilities for domestic and foreign operations. It identifies key responsibilities for units such as the Joint Task Force-Civil Support (JTF-CS) and addresses other command considerations for the Incident Command System (ICS) supported by the Federal Emergency Management Agency (FEMA).

Planning Considerations

Chapter III discusses key aspects of CM as it relates to deliberate planning and crisis-action planning. It discusses other key planning considerations such as information management (IM) and TIM.

Response

Chapter IV provides guidelines on response actions for a CM incident. The chapter indicates important common responsibilities for detection, assessment, and contamination-control considerations. The chapter also outlines critical response tasks during response execution.

Recovery, Transition, and Redeployment

Chapter V describes key aspects of preparing and executing a mission recovery plan. The transition addresses factors such as transition of responsibilities and functions to other organizations. Other key areas addressed in this chapter include requirements for providing important documentation such as documenting lessons learned and after-operation follow-up.

Education and Training

Chapter VI addresses key education and training considerations for support of CM. It addresses key areas such as exercises and simulation and modeling that are important for individual and collective training.

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Chapter I

NUCLEAR, BIOLOGICAL, AND CHEMICAL ASPECTS OF CONSEQUENCE MANAGEMENT

1. Background

a. Consequence management is a comprehensive US counterproliferation strategy that consists of a set of mutually supporting core capabilities. These core capabilities are counterforce operations, active and passive defense, and CM operations. As part of this strategy, CM (in the context of the Federal Response Plan [FRP]) includes measures to protect public health and safety; restore essential government services; and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. Conversely, within the framework of DOD Directive (DODD) 3025.15, CM is defined as "those essential services and activities required to manage and mitigate problems resulting from disasters and catastrophes." Such services and activities may include transportation, communications, public works and engineering, fire fighting, information planning, mass care, resources support, health and medical services, urban search and rescue, hazardous materials, food, and energy. As part of an overall federal response to CM, DOD assets could be notified by the NCA to provide support to a lead federal agency (LFA) such as FEMA or the Department of State (DOS) (depending on the location). Specifically, within the context of this MTTP manual, the discussion will focus on CM actions taken in response to a terrorist NBC incident/accident.

b. Interagency involvement is one of the fundamental aspects of CM. DOD planners understand that other federal agencies will likely have the lead role, and there must be an understanding of their functions and terms of reference (i.e., understanding the civilian incident command system [ICS] and definitions for terms such as CM). For example, the definitions for CM will vary depending on the source document (i.e., FRP versus DODD 3025.15).

NOTE: Presidential Decision Directive (PDD) 39 defines the LFA as the federal department or agency assigned lead responsibility to manage and coordinate a specific function, crisis, or CM.

c. US forces may be required to support civil authorities in domestic or foreign situations/incidents due to deliberate or unintentional use of NBC weapons or materials. Commanders must prepare an appropriate response to meet the full spectrum of NBC incidents, both deliberate and unintentional, to support civilian, HN, or military installation recovery. Support to civil authorities from DOD would be according to applicable federal emergency plans and would likely require coordination and cooperation with agencies, organizations, and individuals outside the military's chain of command or direct control. A joint force commander (JFC)/JTF may be in a supporting role to the US ambassador and his Country Team or to a LFA such as the US FEMA. The JTF's task organization will likely be a composite organization of conventional forces (i.e., security, support elements, etc.) and units with specialized capabilities such as explosive-ordnance-disposal or other special-response teams.

(1) Support Role (Foreign). The primary responsibility for managing and mitigating the effects of a foreign incident resides with a HN government. If the HN government would request US assistance, DOS serves as the LFA. DOD support could be part of the US response and would be coordinated through the appropriate chief of mission (COM) and the country team. DOD assets would be under the command of the applicable geographic combatant commander, and all US-government support would be coordinated by the resident COM and the country team.

(2) Support Role (Domestic). As directed in PDD-39, FEMA is the LFA for CM. DOD support to FEMA (as the LFA for CM) could be to render "technical-operations" support to identify, assess, dismantle, transfer, and dispose of a contaminant or conduct decontamination operations. For example, decontamination operations may be conducted by military units to support casualty decontamination or for support of long-term restoration operations. Additionally, an incident involving an NBC environment would likely require a response according to a specific federal emergency operations plan (OPLAN) (FRP, National Contingency Plan [NCP], Federal Radiological Emergency Response Plan [FRERP], etc.). These plans designate a LFA to coordinate the federal response. The type of emergency determines the LFA. In general, an LFA establishes operational structures and procedures to assemble and work with agencies providing direct support to the LFA. Appendix I shows the LFA for each of the designated emergency support functions (ESFs) in the FRP. In only one case (Public Works and Engineering) is DOD (Army Corps of Engineers) the LFA. In all other ESFs, DOD provides support but does not lead.

d. For DOD's support role (domestic or foreign), JFCs conduct planning to meet the various NBC and radiological threats. The actions of the JFC could include measures to anticipate, prevent, and resolve a terrorist threat or incident.

2. Environment

a. Potential Adversaries.

(1) Potential adversaries who might possess NBC capabilities include nation-state and nonstate groups. Nation-state and some nonstate groups have traditional territorial and population bases of power. Other nonstate groups rely on the shared interests and capabilities of members and are relatively unfettered either by geographic and political boundaries or the international norms of state conduct. Nonstate groups can also include terrorist (see Figure I-1); guerrilla and criminal organizations; and individuals with the motivation and resources to hold US interests, forces, allies, designated friends, and nonstate actors at risk. Nation-states may threaten to use or use NBC capabilities against nonstate groups within their country. In 1988, shortly after the first Gulf War, Iraq used chemical weapons against the Kurds, a minority ethnic group in Iraq seeking autonomy. Shortly after the second Gulf War, Iraq threatened to use chemical weapons against rebellious Kurds and Shiite Moslems. Only through the threat of US military intervention was Iraq deterred from carrying out its threat. In the event of a future incident, the US needs the option to be prepared to conduct foreign CM in a nonpermissive environment.

(2) Regional powers may use NBC weapons for coercion or aggression against US allies or other friendly states. Armed adversaries may also directly or indirectly threaten US forces, citizens, and other interests. Transnational and nonstate groups with NBC capabilities may pose similar threats abroad and to the US homeland. States with these capabilities may succumb to internal turmoil that creates the possibility of NBC or radiological dispersal device (RDD) events within their territory or smuggling of NBC materials or weapons to other states or nonstate groups.

(3) Civilian populations, critical infrastructures, and unwarned and unprotected military forces are especially vulnerable. Joint and multinational operations, in areas where indigenous friendly forces and populations have less protection than US forces, are similarly vulnerable. Adversaries may employ NBC weapons to assail these vulnerabilities and to seek to overcome the advantages of the US operational method—superior leader development and training, technology, combat doctrine, and high operating tempo. In so doing, adversaries may believe they can dictate the terms of the conflict to the disadvantage of the US.

(4) An adversary may have incentives to employ or threaten to employ NBC weapons, thus seeking to deter US intervention and attempting to gain an early tactical advantage. During a MOOTW situation, an adversary could employ NBC weapons to prevent, limit, or reverse US involvement and fracture coalition public support and unity. Late in a conflict or as a last resort, an adversary could employ or threaten to employ NBC weapons to avoid defeat and influence the terms of conflict termination.

(5) Adversaries may deliver weapons by conventional delivery means, by special-operations forces (SOF), or through the use of terrorists. Potential adversary objectives and targets could include civilian populations and infrastructures, as well as military forces and facilities, home and abroad. Clandestine attacks could seek to cause terror among the populace, alter the political objectives of the US and its coalition partners, and take revenge against US and coalition actions. Adversaries with long-range delivery means could seek to deny the US forces a sanctuary, hold civilian populations and infrastructures hostage, and retaliate directly against the US and coalition partners distant from the area of conflict.

(6) The threat for foreign and domestic operations is increasingly nonlinear and unpredictable. In the event that DOD is required to support CM, timely information and intelligence is critical. Given the case of the Tokyo Subway incident (see Figure I-1) and other terrorist incidents, procedures must be in place to detect, identify, and mitigate the effects of these types of weapons. Terrorist threats must be recognized as legitimate and planned for accordingly. The threat could include conventional explosive devices with NBC materials.

DEATH IN THE SUBWAY

Until last week, Kasumasa Takahashi was just another faceless Japanese bureaucrat, the deputy stationmaster at Kasumigaseki subway station in central Tokyo. The blue-suited mandarins of the nation's key ministries who poured from the commuter trains every morning were his customers: Takahashi took their tickets, pointed them up the proper escalators and kept the sprawling station - where three major subway lines converge - so clean that the white gloves he wore on the job were seldom soiled.

Then last Monday, suddenly and quietly, the 50-year old career subway man became a hero. The 8:14 a.m. Chiyoda Line train bound for Yoyogi-Uehara pulled in on track 5 with an obvious problem. Passengers were spilling out of its first car with tears streaming, choking, some foaming at the mouth. Takashashi walked into the car, picked up a foul-smelling, 6-inch high package wrapped in newspaper and carried it onto the platform. Drops began leaking from it onto the platform tiles, and Takashashi started to mop them up with his handkerchief. Then, he collapsed and lost consciousness. The man whose son and brother were also subway workers never came out of the coma, and he died later that day in a nearby hospital.

The poisonous nerve gas that killed Takashashi and nine other Japanese and injured more than 5,000 was Sarin (GB), invented by the Nazis and applied with deadly efficiency, suggested Japanese authorities, by members of Aum Shrinrikyo, an apocalyptic religious sect. In the following days, gas-masked police, accompanied by a few Japanese military personnel and several caged canaries used to detect deadly fumes, raided two dozen sites throughout Japan where sect members lived. They made several arrests and seized bags and barrels of chemicals - tons of toxic material in all - which authorities said could be used to make Sarin.

For the rest of the world, the deadly Tokyo attack was yet another shocking reminder of how vulnerable most societies are to terrorism. The weapon wasn't an exotic nuclear device, but a relatively unsophisticated mixture of chemical agents, most of them readily available. And the alleged perpetrator was not a distant hostile government closely watched by intelligence agencies but a shadowy, global and unpredictable religious band.

SOURCE: Mike Tharp, *U.S. New & World Report,* April 3, 1995

Figure I-1. Tokyo Nerve-Agent Incident

b. Use of NBC Materials.

(1) Nuclear-Materials Incident. An adversary could use nuclear materials to cause blast, thermal, radioactive, and/or electromagnetic effects on personnel or property. The shock waves and high pressures cause damage; thermal radiation can cause burns and secondary fires; and ionizing radiation is likely to be the main cause of casualties.

(2) Biological Incident. A biological incident may result from any device or vector that intentionally uses or carries bacteria, viruses, or toxins to cause mass casualties. The means of dissemination of these agents encompass four primary methods of entry into the body: inhalation, ingestion, absorption, and injection. While inhalation and ingestion are the most common methods of infection, casualties resulting from absorption or injection are also possible. Many of these agents, such as cholera or anthrax, are easily adapted for use as a terrorist weapon; only the biological agent and an effective dispersal system are required. Some dispersal methods, such as using an aerosol spray, can spread agents over vast areas and affect large numbers of people. Biological agents typically have a delayed onset of signs or symptoms, aiding migration, hampering identification, and complicating decontamination. As such, response forces may inadvertently spread the agent and escalate the incident rather than contain it.

(3) Chemical Incident. Chemical incidents can be caused by any device that uses nerve, blister, blood, choking, or irritating chemical agents, or TIC, to produce mass casualties. Chemical agents typically are effective via inhalation, ingestion, or absorption (injection is also possible but less likely).

c. NBC Materials Incidents/Accidents. Large-scale challenges can arise from incidents/accidents involving the release of NBC materials. In the following paragraphs are brief descriptions of incidents that occurred in India, the former Soviet Union, and Iraq.

(1) Bhopal Incident. To illustrate the potential for disaster from an inadvertent incident associated with a TIC, the Bhopal Indian Incident is a classic study. On December 3, 1984, over 40 tons of methyl isocynate (MIC) and hydrogen cyanide leaked from a pesticide plant at the northern end of Bhopal into the surrounding city of one million people. The leak was caused by a series of operator errors. These chemicals are but two of the many extremely TIC that are manufactured and stored in facilities across the world. Bhopal has been called the “Hiroshima of the Chemical Industry.” According to the Bhopal Peoples Health and Documentation Clinic (BPHDC), 8,000 people were killed in its immediate aftermath and over 500,000 people suffered from injuries.

(2) Sverdlovsk Incident. In April 1979 at a Soviet military facility about two and one-half miles from Sverdlovsk, USSR (now Ekaterinburg), an accidental release of biological material occurred. A few days later, some of the townspeople started developing fevers, chills, and other symptoms and some were complaining about chest pains. As time passed, more individuals started displaying these same symptoms and some of the earlier victims died. Attending medical personnel diagnosed this occurrence as an outbreak of anthrax. Eventually, 77 cases of anthrax were reported, with 66 deaths resulting. The autopsies listed anthrax as the cause of death. In 1992, President Boris Yeltsin admitted that the nearby military installation had been part of an offensive biological weapon program and that an epidemic had been caused by an unintentional release of 1 to 2 kilograms of anthrax spores during the process of uploading artillery shells.

(3) The Chernobyl Disaster. On April 26, 1986 at 1:23 a.m., local time, technicians at the Chernobyl Power Plant in Ukraine (former Soviet Union) allowed the power in the fourth reactor to fall to low levels as part of a controlled experiment, which went wrong. The reactor overheated causing a meltdown of the core. Two explosions blew the top off the reactor building releasing clouds of deadly radioactive material in the atmosphere for over 10 days. The people of Chernobyl were exposed to radioactivity 100 times greater than the Hiroshima bomb. The people of northern Europe were exposed to clouds of radioactive material being blown northward through the sky. Seventy percent of the radiation is estimated to have fallen on Belarus. It is estimated that over 15 million people have been affected by the disaster in some way. More than 600,000 people were involved with the cleanup—many of whom are now dead or sick. The health impact of the Chernobyl accident can be classified in terms of acute health effects and of late health effects; moreover, there are also psychological effects, which can influence health. All the acute health effects occurred among the personnel of the plant or in those persons brought in for fire-fighting and immediate clean-up operations. Two deaths were immediately associated with the accident, one person was killed by the explosion and another suffered a coronary thrombosis. A third person died early the morning of the accident from thermal burns. Twenty-eight other persons died later in the treatment centers, bringing the total to 31 deaths in the first weeks after the accident. All symptomatic exposed persons from the site were placed in hospitals. Of the total 499 persons admitted for observation, 237 of these were initially diagnosed as suffering from acute radiation syndrome and most of these were hospitalized in the first 24 hours. The severity and rapidity of onset of their symptoms depended on their dose. The initial early signs and symptoms of radiation sickness from high doses included diarrhea, vomiting, fever and erythema. In the highest exposure group, the first reaction was usually vomiting, occurring within 15 to 30 minutes of exposure. These patients were desperately ill; fever and intoxication as well as diarrhea and vomiting were prominent features. Mucous membranes were severely affected—becoming swollen, dry, and ulcerated—making breathing and swallowing extremely painful and difficult. Extensive thermal and beta-radiation burns often complicated the illness. Within the first two weeks, white blood cells and platelets fell dramatically, indicating a very high dose of radiation. This compromised the production of blood cells in the bone marrow, making it virtually impossible for the patients to fight infection or to retain the natural clotting activity of the blood. Almost all the patients with such high doses died (20 of 21) in spite of the intensive specialized medical treatment provided. At lower exposures, the symptoms, signs and laboratory findings improved. Vomiting began later, platelet and white blood-cell counts did not drop so precipitously, and the fever and toxemia were less pronounced. Beta-radiation burns to the skin were a major complicating factor, and mucous-membrane damage was difficult to treat. However, survival improved markedly at lower doses, so that no early deaths were noted in the less-exposure group.

(4) Kurdish Incident. In 1988, following the Iran-Iraq War, Saddam Hussein deliberately employed chemical weapons against the Kurdish ethnic group in Iraq. In September 1988, two congressional staffers from the US Senate Foreign Relations Committee conducted interviews at five refugee camps in southeastern Turkey. The following is an excerpt of testimony related to the incident: “At 6:00 a.m. on August 25, 1988, eight planes flew over our village. All eight dropped weapons … when they dropped the bombs, a big sound did not come out -- just a yellowish color and a kind of garlic smell. The people awoke, and some of them fainted. Those who poured water on themselves lived; those who could not reach water died. I went to the river. Almost 50 women died. Some

died who went to help their families. Seventy-five people died." In the entire area, thousands of people may have perished. Immediately after the chemical warfare (CW) attack, 60,000 to 100,000 Kurds fled across the Iraq-Turkish border. Among them was Dr. Yossef Hamed, a Kurdish physician. The following comment describes his experience: "People died under my hands. It took us one week to walk here. I think in that time I saw 200 people die from chemical weapons. There are thousands dead . . . At Ismasewa, three people were suffering from what I believe was nerve gas. They were hallucinating and could not move in a straight line. They vomited continuously and had severe spasms of the body."

d. Summary. There are critical points to consider in these types of operations. They can occur in a domestic or foreign area in an operation other than war; may involve deliberate or inadvertent intent and will likely occur without advance notice; and may in the case of advertent use in a foreign area, require forced entry.

3. Military Role (Domestic Response)

This section briefly addresses how the federal government might respond in the event of an incident with DOD assets such as the JTF-CS. The military's role in domestic support operations (DSO) and for support of crisis management and CM is also briefly discussed.

a. Introduction. The military's role in domestic emergencies is well defined and, by law, is limited in scope and duration. Military resources temporarily support and augment, but do not replace local, state, and federal civilian agencies that have primary authority and responsibility for domestic disaster assistance. The employment of military forces has a myriad of legal considerations. Commanders prepare for disaster crisis-management and CM operations by understanding the appropriate laws, policies, and directives that govern employment of the military. Specifically, there are legal considerations that should be considered.

(1) Stafford Act (42 USC 5121). The Stafford Act gives the federal government the authority to respond to disasters and emergencies in order to provide assistance to save lives and protect public health, safety, and property. This assistance requires reimbursement to DOD for the incremental costs of providing support. Approval authority and reporting requirements vary, depending on the duration and type of support requested.

(2) Constitutional Responsibility. The US Constitution allows for the use of the military to execute or enforce the law when necessary to protect federal or civilian property and functions. For example, Limited Military Support to Law Enforcement Agencies (MSLEA) Title 10 USC allows the military to share information and provide equipment, facilities, and other services to law-enforcement agencies (LEAs); however, DOD units must comply with the directions found in DODD 3025.15 before providing support to civil LEAs.

(3) Command Authority. In the event of an emergency or an attack (as described in DODD 3025.1 and DODD 3025.15), a commander may legally assist civil authorities or the public to save lives, prevent human suffering, or mitigate great property

damage under immediate serious conditions before a Presidential declaration of a major disaster or emergency.

b. Federal Response.

(1) When directed to do so, DOD responds to domestic emergencies according to the FRP and any other supporting plans as tasked by the Joint Strategic Capabilities Plan. Coordinated by FEMA, the FRP is the most important of these plans. Along with DOD, 26 other federal agencies provide support when the FRP is fully implemented. The FRP is an umbrella plan to guide federal support to state and local governments. It outlines federal, including DOD, responsibilities and provides the framework for coordinating civil-military requirements.

(2) Following a Presidential declaration of an emergency/a disaster declaration under the provisions of the FRP, the President appoints a federal coordinating officer (FCO) to manage the federal assistance efforts. The defense coordinating officer (DCO) is appointed by the supporting commander in chief (CINC) and serves as the principal DOD point of contact (POC) at the Disaster Field Office (DFO) for providing military support. The commander, US Joint Forces Command (USJFCOM), as the lead operational authority, may task a US Continental Army (First and Fifth US) to conduct planning and coordination for disasters and domestic emergencies as well as to appoint DCOs following a disaster declaration. The DCO supervises the defense coordinating element (DCE) and, at the discretion of the CINC, the DCO may assume control of all federal military units involved in the disaster. However, the severity of an incident could warrant the deployment of the JTF-CS (see paragraph c) to render comprehensive support (see Figure I-2).

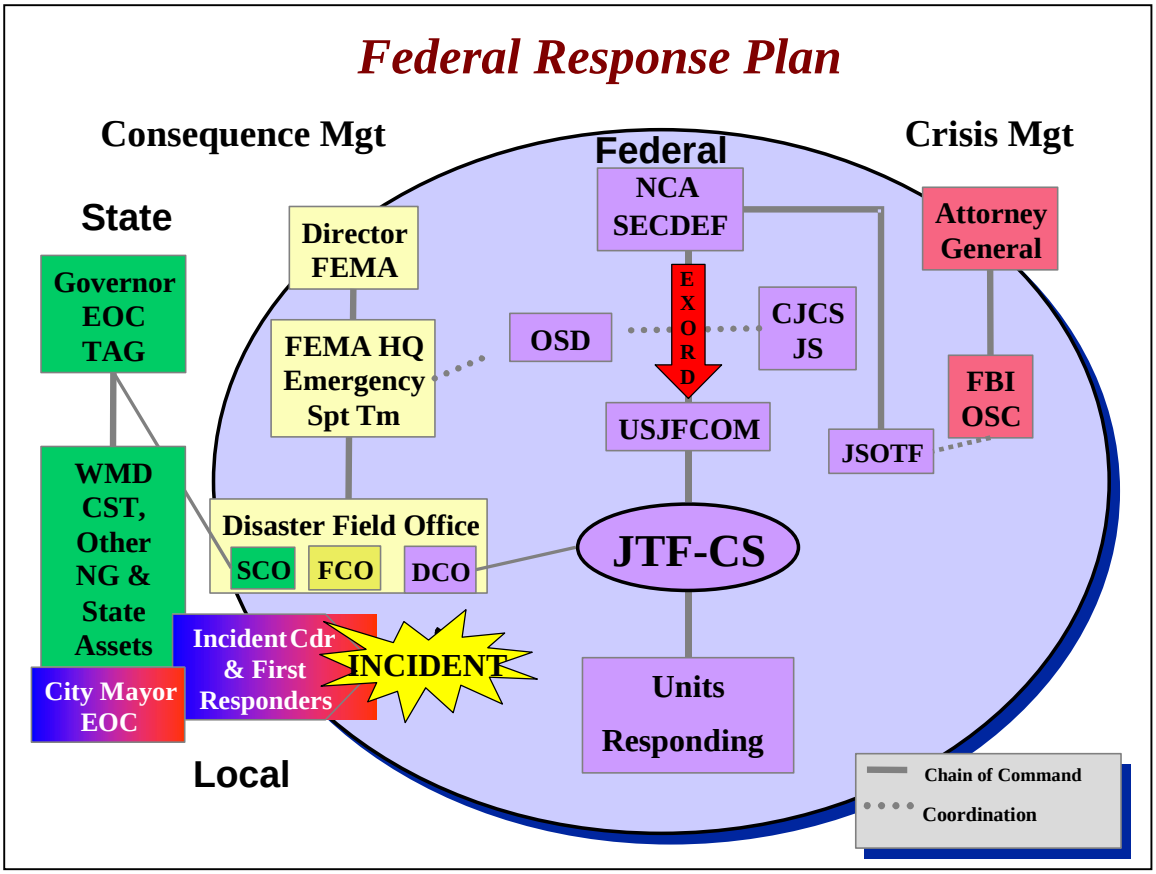

Figure I-2. DOD Response to WMD Incident

c. Joint Task Force-Civil Support. According to the JTF-CS Implementation Plan, approved September 23, 1999, the SECDEF established the JTF-CS to support LFAs in responding to WMD threats, incidents, and national security special events (See Figure I-2). The JTF-CS concept uses a small, permanent staff to execute daily operations involved in shaping, responding, and preparing for DOD's crisis management and CM WMD response. Once the JTF is given an operational tasking to deploy or respond, the small, permanent staff is augmented with trained staff personnel to perform the necessary functions required of a deployed JTF headquarters (see Chapter II for more information on the JTF-CS).

d. Domestic-Support Operations. DSO are generally conducted in three stages: response, recovery, and restoration. The military's primary role is in the response stage. As the operation moves into the final stage (restoration), their role steadily decreases. Response activities by JTF-CS assets will likely focus on those actions to save lives, preserve life and safety, protect property, and prevent further damage to the environment (Response operations are addressed in detail in Chapter IV). Recovery activities begin the process of reestablishing the infrastructure and services. Restoration is a long-term process that eventually returns the community/installation to its predisaster state.

e. CM Planning in Support of Crisis Management. Joint forces may conduct CM planning in support of an LFA during crisis-management operations. Normally, these operations may be conducted in support of the following types of situations:

(1) National Security Special Events. When an event has been designated by the Attorney General and the Secretary of the Treasury as a "national security special event," the LFA's request for DOD assistance goes to the DOD Executive Secretary and, upon SECDEF's approval, joint forces deploy in support of the LFA, as required. During national security special events, such as the 1996 Atlanta, Georgia, Olympic Games, the LFA could be conducting routine surveillance and tracking operations while the JTF staff does generic planning and predictive analysis. If a significant threat is identified, planning and unit alert postures can be adjusted, as necessary. Since this operation is typically well forecasted, the C^2 relationships within DOD will be established before the event. The JFC will be prepared to provide C^2 of all or any portion of DOD forces deployed in support of the event except the JSOTF and the US Army Corps of Engineers (USACE).

NOTE: For more information on JSOTF operations, duties, and responsibilities, see JP 3-05.3.

(2) Short-Notice Events. Should a significant threat be identified, joint forces, when directed by SECDEF, deploy in support of the LFA to plan for CM. The tasks to be accomplished will focus on detailed planning, predictive analysis, and adjusting alert postures for CM units should it be needed. During this mission, the LFA (typically the FBI) will be conducting crisis management operations. Since this operation is typically reactive in nature, any DOD forces deployed in support of CM planning will normally be assigned operational control (OPCON) to the JFC, unless exempted by higher authority.

f. Consequence Management. As with combat operations, planning for CM requires mission analysis and command-estimate processes to clearly define potential threats, including NBC weapons and other toxic materials, and associated vulnerabilities. Further planners (JFC or installation) realize that CM measures could be undertaken for support of domestic or foreign operations. Overall, the purpose of DOD CM operations is to minimize the impact of the incident on a specific area of operations. These CM plans are also visibly and successfully exercised periodically in order to enhance the credibility of US deterrence on potential adversaries. Commanders understand their responsibility to coordinate with applicable civilian authorities and agencies to prevent and, if necessary, mitigate and manage the consequences of deliberate or accidental NBC employment or similar toxic material incidents. This process is aided in the US as detailed interagency processes (contained in documents such as the FRP and/or the National Oil and Hazardous Substances Pollution Contingency Plan) guide the US Armed Forces in providing MACA to such events.

4. Military Role (Foreign Response)

For foreign operations, the DOS and the US ambassador coordinate US activities through the Country Team (see Figure I-3), with US-agency representation (including the DOD) as required in the specific situation. The military chain-of-command from the NCA to the JFC remains in effect, even though a non-DOD agency (i.e., the DOS) may have

overall lead responsibility for NBC-related CM actions. To support the foreign elements, response elements such as the JTAC or FEST (composed of specialized personnel) are available to US force commanders for assistance in conducting CM actions to mitigate and manage the consequences of an NBC attack or other toxic-material contamination. Foreign CM operations can be designed around five basic phases: situation assessment and preparation, immediate assistance, extended operations, disengagement/handover, and redeployment.

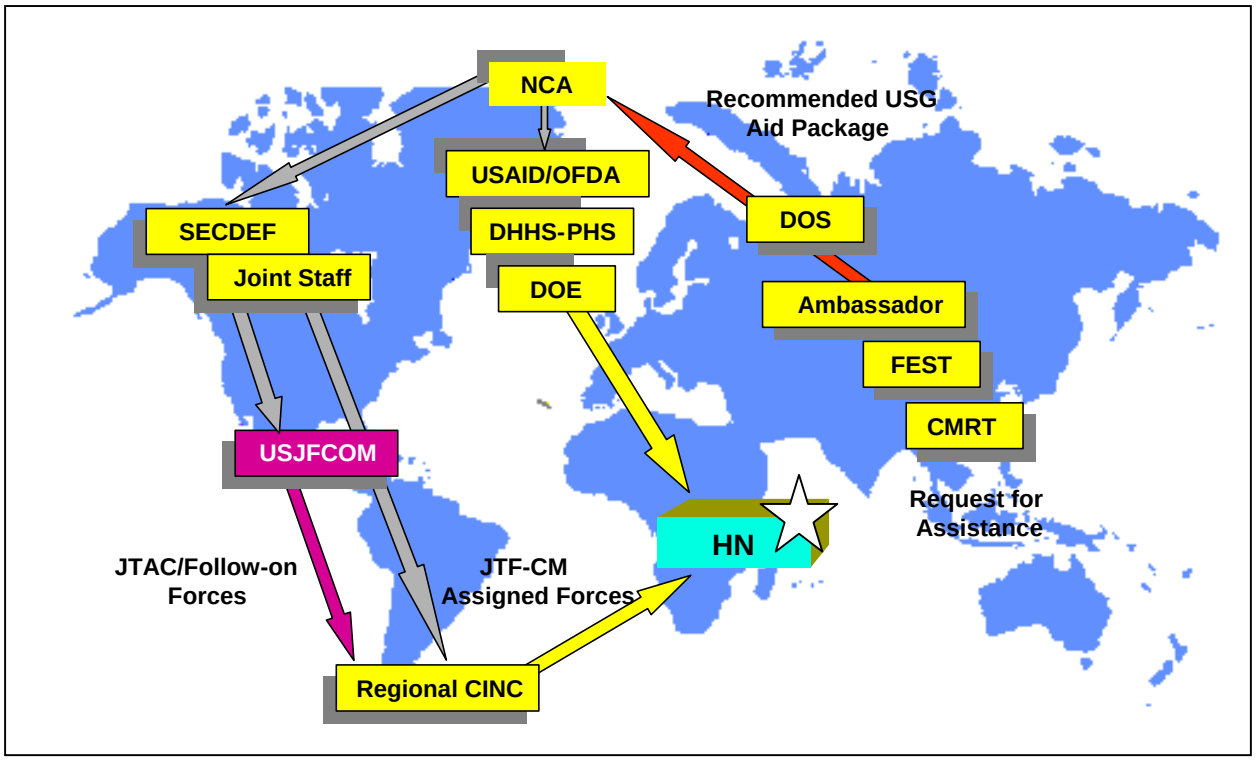

Figure I-3. CM Foreign Response

a. Phase 1, Situation Assessment and Preparation. Actions during this phase could include—

(1) Determining the incident type.

(2) Conducting a mission analysis and the activation of the C^2 structure and/or CM assets for an immediate response.

(3) Determining the availability of combatant command theater and continental US (CONUS)-based assets.

(4) Determining the adequacy of existing HN plans to resolve WMD incidents and the status of HN, allied, international, and nongovernmental assets responding to the incident.

(5) Determining the status and the availability of required movement assets.

(6) Conducting necessary medical preparation of US forces and perform initial disease and environmental health threat assessments on deploying forces and the local civilian population.

(7) Preparing initial public-affairs (PA) guidance and plan formulation.

(8) Identifying deficiencies in the status of forces agreements (SOFA) that provide for the protection of US personnel.

(9) Identifying and preparing the required forces for deployment. Establishing liaison with HN and allied/coalition assets.

b. Phase 2, Immediate Assistance. Actions during this phase could include—

(1) Deploying the required forces.

(2) Preparing to assume responsibility for the transportation of a recovered weapon to a point of disposition.

(3) Assisting HN forces in isolating the incident area.

(4) Collecting and analyzing samples.

(5) Determining the downwind/fallout hazard.

(6) Assisting HN forces in evacuating civilians from the incident site and the surrounding area to facilitate operations.

(7) Providing security for relief personnel and facilities involved in the incident response.

(8) Providing advice and assistance to local medical authorities. Assist the HN in monitoring disease/injury trends (epidemiological surveillance) and in performing disease and environmental health threat assessments.

(9) Assisting HN forces in conducting triage and providing emergency medical treatment for initial casualties.

(10) Assisting HN forces in providing mortuary support.

(11) Assisting with search-and-rescue (SAR) operations.

(12) Assisting with fire-fighting operations.

(13) Assisting the HN in decontaminating personnel, equipment, and facilities involved in initial-response operations.

(14) Assisting HN forces in initiating a public information campaign to provide necessary information to affected civilians, as well as global and regional media.

(15) Establishing a Civil-Military Operations Center (CMOC) to coordinate military operations with the civilian response effort.

c. Phase 3, Extended CM Operations. Actions during this phase could include—

(1) Continuing to assist the HN in isolating the incident area.

(2) Being prepared to receive additional forces based on the NCA's decision and the severity of the incident. The geographic combatant command's initial response force will assume control of follow-on DOD forces and deployed military assets.

(3) Assisting the HN in establishing displaced civilian centers (DCCs) with adequate shelter and food for civilians affected by the incident area.

(4) Assisting HN forces with mortuary affairs and casualty recovery, classification, and processing.

(5) Assisting in the removal and the disposal of contaminated debris.

(6) Assisting in infrastructure repair.

(7) Assisting the HN with reconstruction efforts to minimize long-term disruption to the civilian population.

(8) Assisting HN forces in decontaminating US, HN, and allied personnel and equipment engaged in CM operations.

(9) Continuing to assist the HN with PA and psychological-operations campaigns.

d. Phase 4, Disengagement and Handover. Based on NCA guidance, hand off operations to HN forces to complete the CM mission.

e. Phase 5, Redeployment. CM forces redeploy according to applicable command guidance.

5. Response Measures

The US military uses the NBC defense principles of contamination avoidance, protection, and decontamination to support civil authorities during CM operations. These principles help the military response elements facilitate a standard response to an incident.

a. Contamination Avoidance. Measures such as detection, warning, and contamination control can be undertaken to support a military response. (See Appendix A for further information on contamination-avoidance measures). During peacetime, units

undertake selected measures (i.e., vulnerability reduction measures, drills and exercises to support crisis-management and CM preparation, etc.) to maintain readiness. These actions are generally taken as part of an integrated approach to exercise established programs/plans. These preparedness actions can take many forms. Possible measures could include—

(1) Conducting assessments of vulnerabilities that could compromise preparedness given the potential threat against various targets, military, and/or civilians.

(2) Performing assessments of the threat. Commanders also assess the criticality of key infrastructures that are essential for functions such as staging and deploying operations.

(3) Exercising antiterrorism/force-protection (AT/FP) plans to provide a maximum deterrent effect on potential adversaries. Commanders also coordinate with civilian authorities and agencies to ensure that applicable measures such as Mutual Aid Agreements are in place to ensure a fully coordinated response.

(4) Accomplishing key measures to further reduce vulnerability through: enforcing operational security; maintaining emergency response plans; ensuring that FP capabilities and redundancy in capability are identified; maintaining NBC defense equipment; conducting joint and interagency planning (i.e., coordinating with FEMA and DOS); and conducting assessments to ensure that response elements (active and reserve components) are properly trained and/or certified for crisis-management or CM operations.

b. Protection. NBC protection conserves capability by providing individual and collective-protection. Protective measures are further discussed in Appendix B.

(1) Individual protective measures can include the use of individual protective equipment (IPE) (protective masks and clothing), medical prophylaxis, pretreatment, antidotes, or other medical treatments. For example, wearing a properly fitted protective mask provides respiratory tract protection, and wearing the protective ensemble provides virtually complete protection against a biological aerosol attack. Some other protective measures may include the use of field expedients. In summary, essential individual protective guidance involves two basic elements: adhering to the levels of protection established at the incident site and respecting the boundaries that establish control zones to minimize or preclude exposure to contaminants.

(2) Collective protection will likely not be used for support of CM operations because activities such as the incident command (IC) will be positioned outside the hazardous areas. Select locations (i.e., high-value C^2 facilities) may use collective protective equipment as a norm, or preincident planning (before a National Security Event) may result in the use of collective protective equipment. However, IPE will be the primary means of protection in contaminated areas. Available collective protective equipment does provide a toxic-free area (TFA) for conducting operations and performing life-support functions such as eating and resting. Contamination transfer into the TFA could compromise the health and safety of all occupants and jeopardize their ability to support the mission. When collective protection is not available, building occupants gain limited protection by closing all windows and doors; turning off air-handling systems; and moving

to closed, inner rooms. With advanced warning, occupants can increase protection by sealing windows, doors, and openings although the building or space may quickly become uninhabitable without cooling or ventilation.

c. Decontamination. Decontamination (or decon) operations support the postattack restoration of forces and operations to a near-normal capability. As forces don NBC protective equipment, mission degradation will occur. This degradation continues until forces can resume operations without wearing IPE. Decon can help minimize the time that forces/response personnel are in protective equipment by reducing, neutralizing, or destroying NBC hazards on personnel and mission-essential resources. Since decon actions are labor intense and assets are limited, commanders must prioritize decon requirements and decontaminate only what is necessary. Commanders may choose to defer decontamination of some items, and depending on the agent type and weather conditions, to defer the use of equipment and/or allow natural weathering effects (temperature, wind, and sunlight) to reduce hazards. Further, the extent and time required for decontamination depends on the situation, mission, and degree of contamination. Decontamination measures are further discussed in Appendix C.

Chapter II

COMMAND AND CONTROL

1. Background

Effective C^2 is essential to fully use available assets in accomplishing CM missions. C^2 relationships in CM may be tailored to a particular situation whether domestic or foreign. Unity of effort focuses on the commander's intent and in maintaining coordination with the LFA. In summary, an effective C^2 system supports the synchronization of military and civilian-agency operations to ensure an effective and efficient response to CM operations.

2. Domestic Operations

a. The USJFCOM established the JTF-CS as a C^2 HQ responsible for the planning and execution of military support to civil authorities (MSCA) for CM of WMD incidents within the 48 contiguous states. The principles that guide a JTF-CS operation include the following:

(1) The JTF-CS will always operate in support of a LFA and will participate as a follow-on CM force behind first responders and local/state assets.

(2) The JTF-CS will respond when the President issues a federal emergency/disaster declaration and the NCA approves an execution order (EXORD) through the Joint Operations Planning and Execution System (JOPES) for their assistance.

(3) The JTF-CS will operate within the guidelines of current plans and procedures used by the LFA, such as the FRP that FEMA uses.

(4) FEMA is the LFA for domestic CM. The FBI is the LFA for domestic crisis management. Subject to SECDEF's approval, the JTF-CS may provide support to other LFAs in certain circumstances.

(5) The JTF-CS does not duplicate the technical response capabilities that currently exist throughout DOD and the federal government.

(6) The JTF-CS is organized and trained to rapidly tailor the scale and character of its response to the requirements of the LFA.

(7) The JTF-CS's relationship to the LFA in a WMD CM mission will parallel the lines of coordination and cooperation that currently exist for any disaster-response mission involving a DOD response. The JTF-CS will generally assume OPCON over designated DOD forces as well as the DCO and his staff.

(8) The JTF-CS establishes effective administrative controls for documenting approval/disapproval of expenditures from the Disaster Emergency Relief Fund. After initial-response operations begin, the JTF-CS submits an estimate of the total funding requirements for the duration of the disaster operations. The JTF-CS responds only to

validated requests for assistance (RFA), captures all costs for support provided, and requests timely and suitable reimbursement from the LFA according to the FRP or other appropriate authorities.

(9) The technical augmentation cell (TAC) serves as the JTF-CS special staff for coordinating and managing chemical-biological (CB) defense response support for an incident. The TAC consists of technical personnel from agencies such as the Chemical-Biological-Rapid-Response Team (CB-RRT), the Defense Threat-Reduction Agency, and the USMC Chemical-Biological Incident Response Force (CBIRF). This cell provides technical advice and assessments to the technical response assets to address CM operations at an incident, as necessary.

b. The JTF-CS will be the USJFCOM standing JTF HQ for all WMD CM within the US and its territories and possessions. In this role, when directed by the SECDEF through USCINCJFCOM, the JTF-CS will assume OPCON of allocated DOD forces (less United States Special Operations Command [USSOCOM] elements and USACE assets) responding to WMD incidents in support of the LFA.

(1) The JTF-CS is organized on a functional basis, as defined in JP 0-2. The USJFCOM exercises COCOM over the JTF-CS. The USJFCOM organizes the JTF-CS, as necessary, to perform CM WMD missions and may elect to assign other forces, over which it exercises COCOM, to the JTF-CS. The SECDEF, through the CJCS, apportions forces (not currently assigned to the COCOM) to the USJFCOM for CM planning and operations.

(2) When delegated OPCON of DOD forces, the JTF-CS will coordinate with the USJFCOM to ensure that adequate C^2 elements are requested and established to handle the potentially large numbers of DOD forces provided for CM responses. Additionally, other task force (TF) HQ could be subordinate to the JTF-CS for planning and execution of CM operations (see Figure II-1). When the JTF-CS conducts a CM operation, another TF HQ may be employed, operating either as an integral part of the JTF-CS or as a separate HQ. As with other designated DOD forces, the commander of the JTF-CS is designated by the appropriate authority to command this TF.

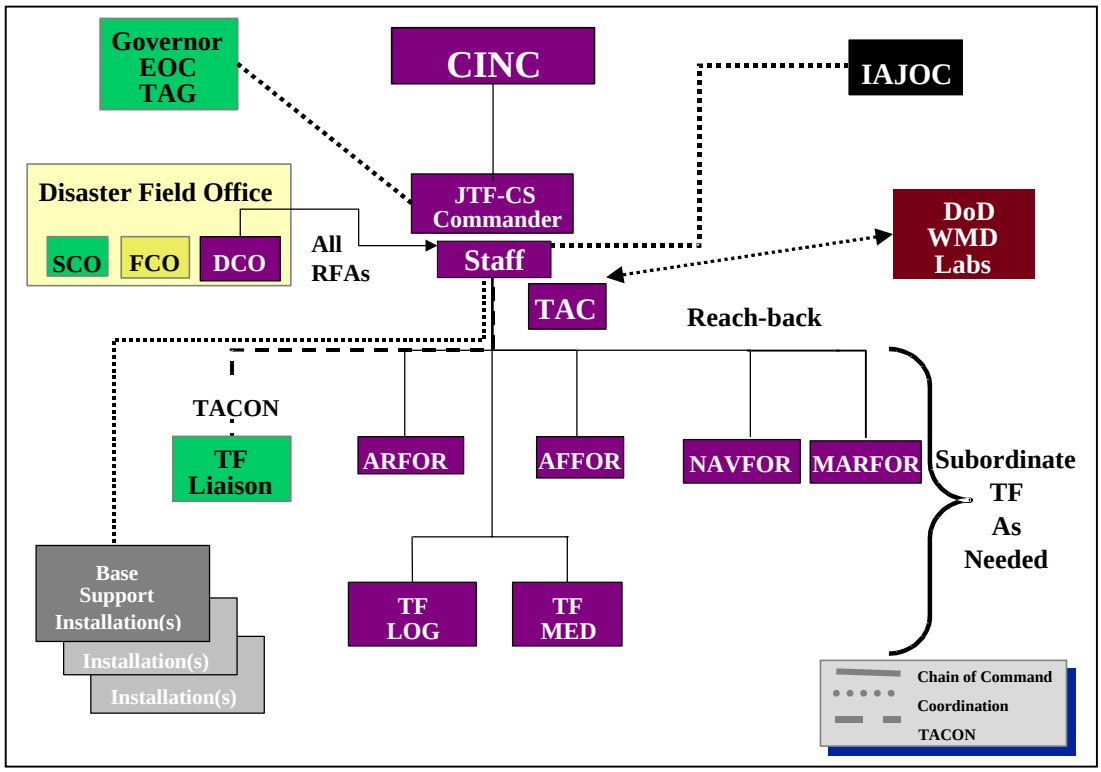

Figure II-1. JTF-CS C^2 Structure

(3) For CM operations conducted in the 48 contiguous states, the USJFCOM is the supported combatant commander for all DOD forces except USSOCOM and USACE assets. For operations in these areas, the JTF-CS, if employed, operates under the OPCON of the USJFCOM.

(4) For CM operations conducted in Puerto Rico or the US Virgin Islands, Commander in Chief, US Southern Command (USCINCSO) is the supported combatant commander for all DOD forces except USSOCOM and USACE assets. For operations in these areas, the JTF-CS, if employed, operates under the OPCON of the USCINCSO.

(5) For CM operations conducted in Hawaii, Alaska, Guam, American Samoa, or any of the US possessions or the Commonwealth of the Northern Mariana Islands in the Pacific area of responsibility, the US Pacific Command (USPACOM) is the supported combatant commander for all DOD forces except USSOCOM and USACE assets. For operations in these areas, the JTF-CS, if employed, operates under the OPCON of the USPACOM.

(6) During an incident, the JTF-CS exercises OPCON over the DCO and the DCE. The DCO continues to operate in the DFO in close coordination with the FCO, the senior FEMA authority on the scene.

(7) As required, the JTF-CS establishes liaison with the state's adjutant general and direct liaison with NG assets such as the WMD-CSTs. For example, WMD-CSTs are Title 32 NG assets employed by the state/territorial governor to assess the size and the specific nature of the situation. Further, other coordination (see Figure II-1) occurs through the DFO. This office serves as a focal point for coordination between the state and defense coordination officers for receipt of actions such as validated RFAs.

(8) Examples of implied operational tasks for the JTF-CS could include identifying contaminated areas, conducting surveys of and identifying NBC hazards, supporting medical operations, and providing logistics support.

3. Foreign Operations

a. Based on the size and the nature of a response to a foreign WMD incident, a geographic combatant commander may designate a JTF to conduct the operation. This brief section provides an overview of a typical JTF HQ staff. The geographic combatant commander develops the mission statement and concept of operations (CONOPS) based upon the direction of the NCA. Input—including requests from the DOS, situational factors, and the time military forces enter the area—affects the mission statement. The geographic combatant commander develops a list of requisite capabilities and tasks his components to identify capable forces. The components establish the force list (e.g., personnel, equipment, and supplies) and movement requirements. The geographic combatant commander approves or disapproves the components' force lists, establishes the JTF HQ, assigns approved forces to the JTF, and determines the command relationships.

b. The geographic combatant commander establishes the JTF when the mission has a specified, limited objective and does not require centralized control of logistics. The mission assigned to a JTF requires the execution of responsibilities and the close integration of effort involving two or more services. The JTF is dissolved when the purpose for which it was created is achieved. JP 3-0 provides general guidance relating to joint operations and JP 5-00.2 provides information on the JTF. JP 4-0 provides general guidance for logistics support of joint operations.

c. The JTF organization resembles traditional military organizations with a commander, command element, and forces required to execute the mission. The primary purpose of the JTF HQ is command, control, and administration of the JTF. During operations, the JTF HQ provides the basis for a unified effort, centralized direction, and decentralized execution. See Figure II-2 for an example of a JTF staff organization.

4. Other Command Considerations

a. The ICS is a FEMA-supported civilian system used to manage operations at a domestic incident site. The ICS is commonly used by civilian local and state organizations that respond to hazardous-material (HAZMAT) (i.e., WMD, etc.) incidents, and its use is becoming standardized in all civilian emergency operations. The principles of the ICS include the following:

(1) Modular Organization. DOD personnel must understand how and where they "plug into" the existing ICS structure when they arrive on scene.

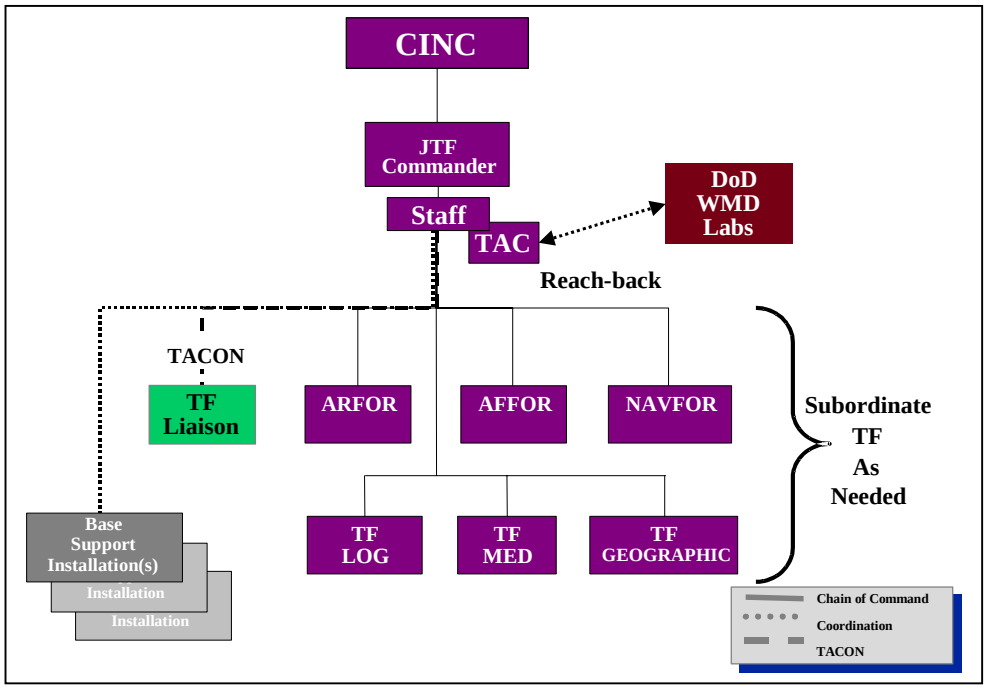

Figure II-2. Notional CM JTF

(2) Integrated Communications. The incident commander should have an established, integrated communications plan and standing operating procedures to ensure that information distribution and active frequency management is enforced. An effective communications plan supports functions such as the conduct of liaison and the coordination of mitigation plans.

(3) Unity of Command. Responders report to one designated person.

(4) Unified-Command (UC) Structure. All responding agencies must have a common set of incident objectives and strategy.

(5) Consolidated Incident Action Plans. The incident commander and his planning section should have a clear view of the future action plan to support the end state of the operation.

(6) Use of Common Terminology. Use of common terminology helps to ensure a coordinated response action and also supports standardization and consistency.

(7) Span of Control. Safety as well as sound management influence and dictate span-of-control considerations. Within the ICS, the span of control of an individual with emergency management responsibility should range from three to seven subordinates.

b. The ICS is a modular system that uses common terminology and implements incident action plans in five component (functional) areas: command, operations, logistics, planning, and finance/administration (see Figure II-3).

c. Further, there will generally be a need for the civilian incident commander's staff to coordinate with a supporting JTF staff on technical, operational, or logistics issues. The coordination points between the ICS and a JTF staff could be conducted through staff-to-staff interaction or could be through a CMOC.

(1) Staff-to-Staff Coordination. As the ICS terms in Figure II-3 imply, Table II-1 represents what could be the focal points for staff interaction between ICS and JTF staff organizations (see Appendix A for more information on incident management system [IMS] command and staff functions and responsibilities).

Table II-1. ICS and JTF Staff Counterparts

ICS	JTF
Command	Commander
Operations	J3
Logistics	J4
Planning	J3/J5
Communications	J6
Finance	J4 or J1
Law Enforcement	J2

(2) Civil-Military Operations Center. The JTF could form a CMOC to coordinate military actions for support of the LFA. The CMOC is an ad hoc organization that is normally established by a geographic combatant commander or subordinate JFC to assist in coordinating with other military forces, other US-government agencies, international organizations (IOs), or nongovernmental organizations (NGOs). Its specific size and composition are situation dependent. The CMOC can provide a structure for establishing coordination and cooperation with primarily nonmilitary groups. For example, the CMOC could serve as a focal point for interaction with IOs, NGOs, or civil authorities on topics such as civil defense warning and reporting procedures, response capabilities, medical assistance, and other actions to mitigate the effects of NBC use or other toxic-material contamination. If civil-affairs units are available, they could perform many of the liaison duties. Additionally, during foreign operations, a CMOC could be formed to receive direct taskings direct from the chief of mission's country team to support such actions as receiving validated LFA requests, assigning project numbers, preparing project numbers, and submitting requests to the JTF operations center.

NOTE: See FM 100-23-1/Fleet Marine Force Reference Publication (FMFRP), 7-16/Naval Doctrine Command Tactical Note (TACNOTE), 3-076.6/Air Combat Command Publication (ACCP), 50-56/Pacific Air Force Publication (PACAFP), 50-56/US Air Force Europe Publication (USAFEP), 50-56 for more information on the CMOC.

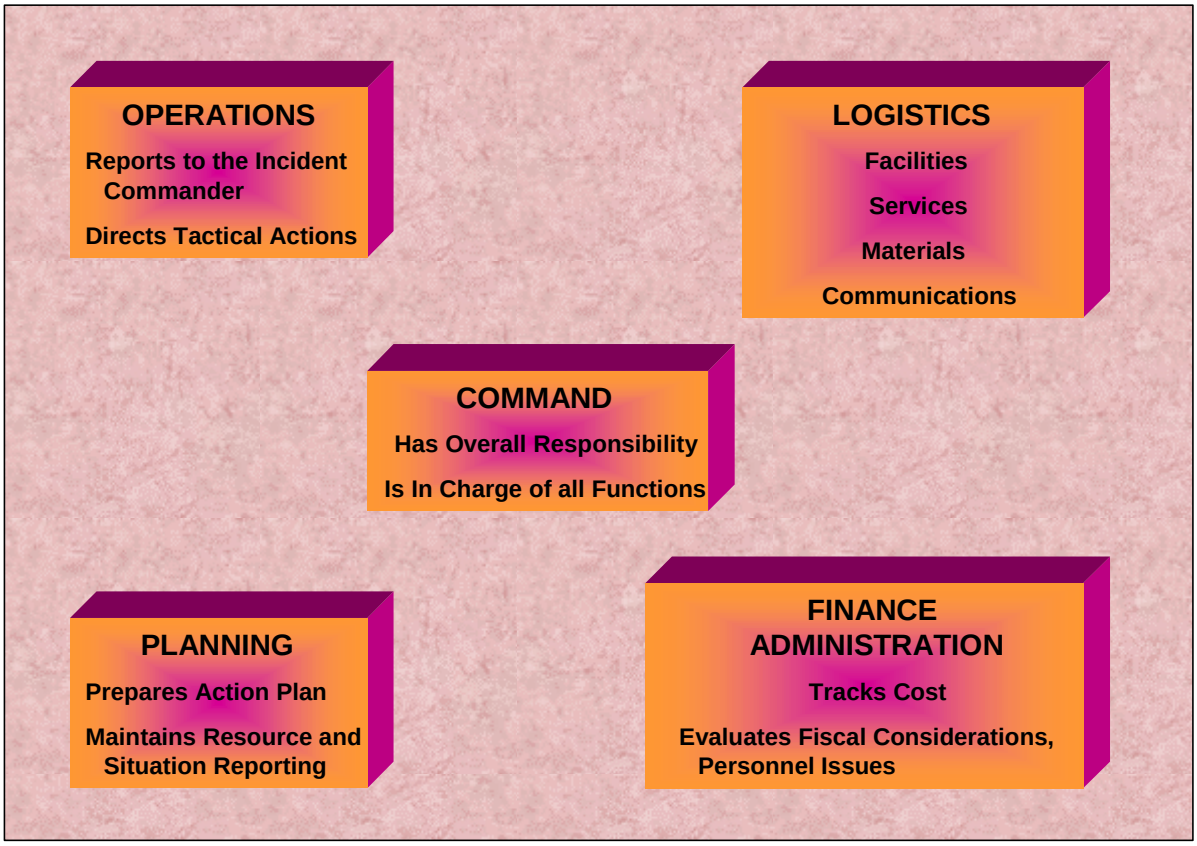

Figure II-3. Components of the ICS

5. Reporting Requirements

a. Reports. Reports will be submitted per JTF guidance as described in the OPLAN/operation order (OPORD). Additional reporting requirements may include service-specific reports, but such reports will be routed with the concurrence of the JTF commander.

b. Unit Records. Unit record keeping and reporting are critical. Unit records include data on personnel according to applicable theater medical-surveillance directives. The accuracy of unit record keeping will enable the tracking of a required audit trail to monitor postincident information for key areas such as long-term health effects on personnel that were exposed to HAZMAT. Detailed accounts could support multiple tasking that could occur following an incident (i.e., tracking individual exposure and key events). As a part of the record keeping, after-action reports (AAR) will also be prepared.

Chapter III

PLANNING CONSIDERATIONS

1. Planning and Response Concept

a. A challenge for commanders conducting CM operations is to adequately protect personnel, materiel, and equipment from an NBC incident. There is a need for a response capability to save lives, contain an incident, and recover to a point that permits operations to resume. Confronting this challenge requires a comprehensive and integrated approach from threat identification to incident response and recovery. This comprehensive planning ensures that measures of effectiveness are considered. These measures serve to provide a tool to help assess when the mission's established end state is met.

b. No single agency at the local, state, federal, or private level possesses the capability and expertise to act unilaterally on many complex issues that may arise in response to threats from NBC accidents or incidents. For example, an act of terrorism, particularly an NBC event directed against a large population center within the US, may produce major consequences that could overwhelm the capabilities of local and state governments. Planning and coordination by local, state, and federal governments must be proactive and should be accomplished before an incident. Deliberate and crisis action planning considerations are discussed in the following paragraphs.

2. Deliberate Planning

a. The deliberate planning process provides for the deployment and employment of apportioned forces and resources that occurs in response to a hypothetical situation. Deliberate planners rely heavily on assumptions regarding the circumstances that will exist when the plan is executed. Well-developed and detailed planning becomes increasingly important when planning for operations in any number of possible locations, facing any number of unknown threats, and coordinating operations with a wide variety of emergency-response forces. To improve coordination and integration with civilian responders, commanders work through the military planning process and maintain awareness of the current threat. Key planning considerations include the following:

(1) Liaison with Civil Authorities. Commanders identify all response agencies within their area of operations (AOs) and coordinate preincident planning, exercise, and training opportunities. All emergency-response teams conduct liaison frequently with their civilian counterparts.

(2) Coordination with Supporting and Supported Military Organizations. Response elements need to be aware of the many DOD agencies that they may have contact with in a response role. Close coordination with reserve-component forces within their respective states, JTF personnel, and any other active emergency response elements (i.e., US Army Technical Escort Unit [TEU]) is required. (See Appendix D for more information on other units.)

(3) Operations in an NBC Environment. There are unique characteristics regarding operations in an NBC environment. When developing plans, response elements account for the challenges inherent in operating within these environments.

(4) Risk Analysis and Vulnerabilities. A risk analysis is a commander's tool for ensuring the safety of his unit while operating in a hazardous or threatening environment. Risk analysis is not meant to replace sound judgment on the part of a commander. A detailed analysis of known threats assists the commander in identifying the level of FP.

b. Military units develop deliberate plans to respond to incidents within their assigned regions. Response plans should be updated regularly and coordinated with the appropriate response agencies in the region. Plans should focus on both the unanticipated event (e.g., Chernobyl-type disaster, nation-state weapons use against its own population) and potential terrorist targets, such as special events, high-profile buildings, medical- and scientific-research centers, and air- and rail-transportation platforms. Response elements also should prioritize planning efforts in coordination with the other response agencies within their region. Planning efforts should be prioritized based on the most likely threats. The following examples indicate specific items that plans could address.

(1) Vulnerability-analysis considerations.

- Identify sources for threat information, potential targets, and likely threat scenarios (i.e., type of agent; likely number of casualties; identification of high-profile facilities, significant events, and/or adversary's entry denial capabilities and doctrine).

- Assess possible delivery methods.

- Obtain detailed maps of the area including imagery and blueprints if available, etc.

NOTE: Standard military mission-oriented protective posture (MOPP) gear is not effective against some TIM and does not meet civilian requirements for protection. Standard military detectors do not work against many TIM. For more information, see Appendix B.

(2) C^2 considerations.

- Establish C^2 relationships.

- Know the locations of the incident command post (CP) and joint operations center (JOC).

- Identify critical support facilities and resources and capabilities that could assist in CM.

- Maintain coordination with civilian agencies.

- Use liaison officers and execute FP requirements (alert means, evacuation plans, security).

(3) Logistical considerations.

- Ensure that critical resupply requirements are addressed (e.g., self-contained breathing apparatus [SCBA] refills).

- Identify primary and alternate transportation routes and staging areas.

- Ensure maintenance support for military-unit commercial-off-the-shelf (COTS) items and anticipate resupply requirements for NBC-related consumables.

(4) Coordination considerations.

- Maintain current technical reach-back points of contact.

- Coordinate with civilian authorities to remain aware of applicable emergency-response plans (FEMA, state, local, etc.).

- Determine augmentation requirements (e.g., liaison, linguist support, and technical medical expertise).

3. Crisis Action Planning

Crisis action planning involves time-sensitive planning for deploying, employing, and sustaining of assigned and allocated forces and resources that occur in response to a situation that may result in actual military operations. For an incident, essential elements of information (EEIs) may include the following:

a. Damage and Injury Profile. Assess the damage and casualty estimates. NBC devices or vectors each present unique considerations that impact CM contingency planning. Planners use available decision support tools to conduct the assessments.

b. Information Management. Timely collection, analysis, reporting and dissemination of information are paramount. Establish measures to coordinate IM activities. Other requirements include IM measures that ensure the following:

(1) Interoperability for reports being submitted to and received from the civilian ICS.

(2) Measures that provide for situational awareness to support the commander and staff (e. g., number of casualties, boundaries of contamination).

c. Containment. Planners receive information where perimeters have been established from the incident commander. The contaminated site should be clearly marked to prevent personnel from mistakenly entering. Personnel who have been in contaminated areas must be identified and requisite actions taken (medical treatment, decontamination,

etc.). Site containment also provides for actions to consolidate and confine any contaminated material (water runoff). Personnel exposed during the incident, subsequent cloud passage, or postincident entry into the contaminated area are given a high priority in response actions. This includes responders and other contaminated individuals. Early definition of the perimeter is important so that potentially contaminated people may be identified and measures taken to prevent the contamination of additional people. The potential contamination of critical infrastructure and transportation assets presents a health problem for both responders and bystanders. Procedures to be considered include the following:

(1) Initial monitoring upon arrival to determine preliminary site characterization and personnel contamination.

(2) Procedures to minimize the spread of contamination.

d. Decontamination. Planners identify and understand the casualty, personnel, and equipment decontamination requirements and standards. Coordination is required with local, state, and federal authorities. Resources must be provided that can monitor, detect, and identify the degree and source of contamination. Subject matter experts (SMEs) conduct risk assessments to determine options for the conduct of decontamination and recommend the allocation of necessary resources to support the decontamination process. Safety is a paramount concern in the decontamination planning process to ensure that first responders' exposure is minimized. Control measures are also taken to minimize the exposure to and the spread of any contamination.

(1) Contamination control. Contamination-control measures ensure contamination is not transferred from an area that is already contaminated to an uncontaminated area through the orderly processing of personnel, equipment, and vehicles entering and leaving the contaminated area. The actual amounts of material used for contamination control depend on conditions at the incident site.

(2) Equipment decontamination. Military-specification equipment should be decontaminated according to pertinent military technical publications; however, similar guidelines may not exist for other equipment. Some equipment used by the response force in the contaminated area may remain there for future use and will not require immediate monitoring or decontamination. Some equipment may not be salvageable and will require proper disposal. If civilians in the contaminated area are sent or go to processing points using their own vehicles, the vehicles should be monitored before moving away from the area. All outer surfaces and the air filters may have been contaminated by airborne contamination. Wheel wells, tires, and the rear end may be contaminated from driving across contaminated areas. Unless the windows were down or ventilators open, detectable contamination of the interior is most likely on those surfaces contacted by vehicle occupants (e.g., floorboards, seats).

e. Evacuation. Planners determine if personnel in downwind hazard areas were directed to seek shelter in place or evacuate. This planning is coordinated with local, state, and federal authorities. Specific planning factors include resourcing protective-equipment requirements for large numbers of people and medical support. Personnel or equipment evacuated from a hazard area are checked for the possibility of residual contamination.

Contaminated casualties are decontaminated before evacuation to avoid health-care-facility contamination. For example, the presence of a contaminated casualty in a hospital and the passage of chemical vapors throughout a building's ventilation system could close the entire hospital.

f. Medical Requirements. Medical planners need any available epidemiological and diagnostic patterns resulting from the incident. Military medical units can provide either specialized NBC advisory response capabilities or augmentation that can expand existing medical capabilities. This process includes receiving input from first responders reporting information on signs and symptoms from casualties or agent characteristics (i.e., smell/odor). Medical planning addresses preventive medicine (PVNTMED), laboratory services, casualty evacuation, and decontamination, and treatment of casualties.

g. NBC Reconnaissance Measures. Military forces conduct sampling, surveying, and surveillance. Typical military units generally have only basic sampling and detection capabilities. Specialized military units, such as those listed in Appendix D, have more specialized capabilities and may be required to conduct—

(1) Sampling. Units conducting sampling ensure that the chain of custody is maintained, and samples are placed in sealed containers to eliminate the possible spread of any contamination.

(2) Surveying. Surveys determine the presence or absence of contamination. Surveys also determine the type of contamination (i.e., gamma; blood and blister; and etc.) and level or type of contamination (i.e., centigrey [cGy]; persistent and nonpersistent; and etc.) and its' boundaries. Planning also identifies the need for a capability to conduct low-level monitoring (e.g., chemical or radiological) to support CM actions. This type of capability will likely come from specialized response teams including military and/or civilian personnel.

(3) Surveillance. Surveillance supports early warning of a potential hazard (e.g., chemical or biological aerosol). Response elements may be tasked to conduct surveillance of the ambient air to determine the absence or presence of contaminants. The information from the surveillance is used to influence protection and/or support medical-treatment decisions.

h. Weapon Disposition. Determine what type of weapon is involved. If the military is tasked, units are prepared to dispose of the weapon or provide assistance as required to the agency with the task. Planners determine what type of unit is best capable of accomplishing the task.

i. Transition and Disengagement. The termination of military support to civil authorities during a CM operation is a politically sensitive phase requiring detailed planning. The "end state" defining the point at which military forces disengage from the CM operation is based on the policy that the DOD will withdraw from the operation after eliminating the immediate danger of weapon/agent effects, saving lives, and restoring critical services. DOD will generally not remain to conduct site-recovery operations. When it is agreed that local authorities are capable of assuming responsibilities for the remainder

of the operation, DOD forces will disengage. This could be phased either by function or area. Development of an exit strategy should begin as soon as possible during the response.

j. Force Protection. FP is a top priority during CM operations; it begins from the time units are alerted to move, involves impacted personnel and evacuees, and does not end until redeployment is complete. The following FP considerations are provided as a guide:

(1) Protection from potential threats. Ensure that proper protective equipment is available to response personnel.

(2) Safety. Safety in training, planning, and operations is crucial to successful operations. On-scene command authorities and response personnel must implement requirements established by the appropriate site safety and health plans.

(3) Security. Security elements protect against all acts designed to, or which may, impair the effectiveness of the military forces. This includes guarding equipment and supplies from loss or damage.

(4) Individual Awareness. Commanders and supervisors stress the significance of hazards and the importance of being aware of what is going on around them.

(5) Health. Take measures to protect personnel from contaminants. This will require avoiding contaminated areas and observing their boundaries. Protection of the response personnel includes proper PVNTMED and mental health considerations.

4. Information Management

a. Civilian and Political Considerations. Operations associated with CM are very sensitive to civilian and political considerations. Planners modify and tailor information activities to meet the unique challenges presented in each operation. Information resources at every echelon are structured to provide support that is proactive, predictive, and flexible. The commander ensures all sources of information are considered and fully involved.

b. Legal Considerations. Support to missions such as DSO is limited to those actions that do not violate existing EXORDs and DOD Service regulations and policies prohibiting intelligence collection on US citizens. Before a plan that uses various information assets and personnel in the DSO arena can be implemented, it must receive thorough legal review and approval from the staff judge advocate (SJA). Imagery, if approved, can provide information concerning the extent of damages and could be useful for operational planning.

c. Information Gathering. Support to CM requires a multidisciplined approach. A single-source approach cannot support all requirements.

(1) EEIs that drive the collection-management process require an understanding of all aspects of the area and its cultures, politics, religion, economics, environment, technology, and other related factors.

(2) CM will likely involve in-depth coordination or interaction with civil authorities and NGOs. The term "information gathering" should be used rather than the term "intelligence." Nonmilitary organizations may resent being considered a source of intelligence. By using the term "information gathering," military forces may be able to foster better communications with other agencies and thereby benefit from their valuable knowledge.

(3) The importance of mapping, charting, and geodesy should not be overlooked. It is essential that maps, charts, and support data (to include datum and coordinate systems) are coordinated in advance.

d. Information Support. Successful support during CM relies on continuous information collection and analysis. The commander's information needs in CM are in some ways more complex than operations in war. Peace operations often require augmentation of the staff, and the supporting commander (e.g., the CINC) normally provides detailed analytical support to the deploying commander through split-based operations. This includes anticipating and initiating collection against long lead-time requirements, synthesizing available information on the AOs, and orchestrating the collection efforts of existing organizations. The degree of support needed depends on the size and sophistication of the deploying unit's staff and should be tailored as the operation develops to ensure seamless support.

(1) Technical Information Support. The provision of technical information about possible agents and weaponized materials, the methods of dissemination, and the impact on targets are essential to planning. This information is required during the conduct of an operation. A responder at an incident site should be able to provide information to technical and scientific agencies and receive further information about the type of device or material found on site.

(2) Remote Information Support. A remote ("reach back") information-collection capability is needed. The JTF must be able to access assets such as national-level scientific support, which could be at a fixed or mobile analytical facility.

e. Information Requirements (IR).

(1) During the initial response phase (that includes predeployment and deployment), IR will be tracked and briefed to the commander. This information provides input to support the commander's situational awareness and to support the decision-making process. IR also focus the staff's efforts, assist in the resource allocation, and assist the staff in making recommendations. Liaison and effective coordination with local, state, and federal agencies assist the commander in gaining required information. The intent of IR is for the commander to have the best available information on activities within the AO.

(2) IR that are significant to emergency-response operations during an NBC or radiological incident include, but are not limited to the following:

- Threat conditions/situations/capabilities.

- Determination of FP status and shortfalls.

- Detailed knowledge of the area.

- Detailed information on the type of material used. Consider worst and best case scenarios for options. The types of protection possible against such weapon(s), materials, or vectors; their size, weight, description, and capability; and the methods that could neutralize them.

- Medical facilities or equipment available and shortages of such equipment that could impact on any attempt to neutralize the threat or lessen the consequences. The number of people they can handle and the emergency transportation methods available.

- Number and location of victims and/or other damage.

- Description and status of lines of communication (LOC) including major roads, railroads, waterways, ports, and airports.

- Weather conditions. Refer to meteorological conditions including precipitation, fog, cloud conditions, temperature, relative humidity, prevailing winds, and sunrise/sunset data.

- Characteristics of physical damage in the specific disaster area.

- Population of areas such as trailer parks, apartments, and subdivisions. School buildings and warehouses in these areas are excellent candidates for shelter, feeding, and life-support sites.

- Status of sanitation systems.

- Relief and drainage systems.

- Surface materials. Identify the type and the distribution of soils and subsoils in the area and soil trafficability.

- Sources of all classes of supply needed for critical restoration of normal activities.

- Availability of civilian engineer equipment and personnel.

5. Toxic Industrial Materials

a. TIM Release. The accidental or deliberate release of TIM could also necessitate a request for support from DOD assets. For example, 40 tons of methyl isocyanate was accidentally released from the Union Carbide Plant at Bhopal, India. According to the BPHDC, 8,000 people were killed in its aftermath and over 500,000 people suffered from injuries. This incident was the result of the release of TIM. TIM are often available in

enormous quantities, do not require extensive research, and can be mass-produced. TIM could be released from industrial plants or storage depots through accidental or deliberate damage as a consequence of a strike against a particular facility or as a desperation measure. TIM could also be attractive as improvised weapons and have the potential for inclusion in clandestine weapons programs or contingency plans.

b. Planning for TIM Operations. Before any operation, the response element develops an understanding of the potential hazard from TIM in the area of concern.

Note: See Appendix G for further information on TIM response procedures.

Chapter IV

RESPONSE

1. Background

a. Incidents involving NBC materials may occur without warning and at a time of day and location that will produce chaos, confusion, and casualties. In a no-notice incident, local emergency service and possibly state and federal agency personnel will be the initial responders. Local emergency-response assets are likely to be overwhelmed by the effects or the threat of an incident. On the other hand, local or state responders may have quickly organized at or near the incident using a response-management system that is typically called an ICS. The ICS is used to coordinate actions among various federal, state, and local responders. The ICS is the combination of facilities, equipment, personnel, procedures, and communications operating within a common organizational structure and is used to manage assigned resources to accomplish the stated objectives. The domestic challenge to the JFC is to coordinate the merging of DOD support into the ICS. Significant incidents may warrant multijurisdictional responses and the formation of a UC structure within the ICS. A civilian UC system would include all individuals or agencies that have jurisdictional responsibility (i.e., city, county, state officials). This organization would help coordinate federal, state, local, and private resources together in a response-management system to mitigate the consequences of an incident.

b. The President will issue a proclamation to activate a federal response (to include DOD support) to an incident. The response could involve DOD elements responding to an event at their own installation (foreign/domestic) or to an incident that may have occurred within the civilian community (see Figure IV-1). This chapter addresses the general process flow and potential DOD-asset involvement in response support should an incident occur in an area such as an adjacent community or a joint AO. The USJFCOM provides forces for an incident response within the US and its territories. The USCINCSO (Puerto Rico and the US Virgin Islands) or the USPACOM (Hawaii, Alaska, Guam, American Samoa, etc.) would request support from the USJFCOM for forces to support an incident response in their AOR. For responses in other areas, the appropriate military unified commander may establish a JFC for support to the DOS.

c. The initial actions taken in the early minutes and hours of a WMD response can determine the outcome of an incident—success or failure.

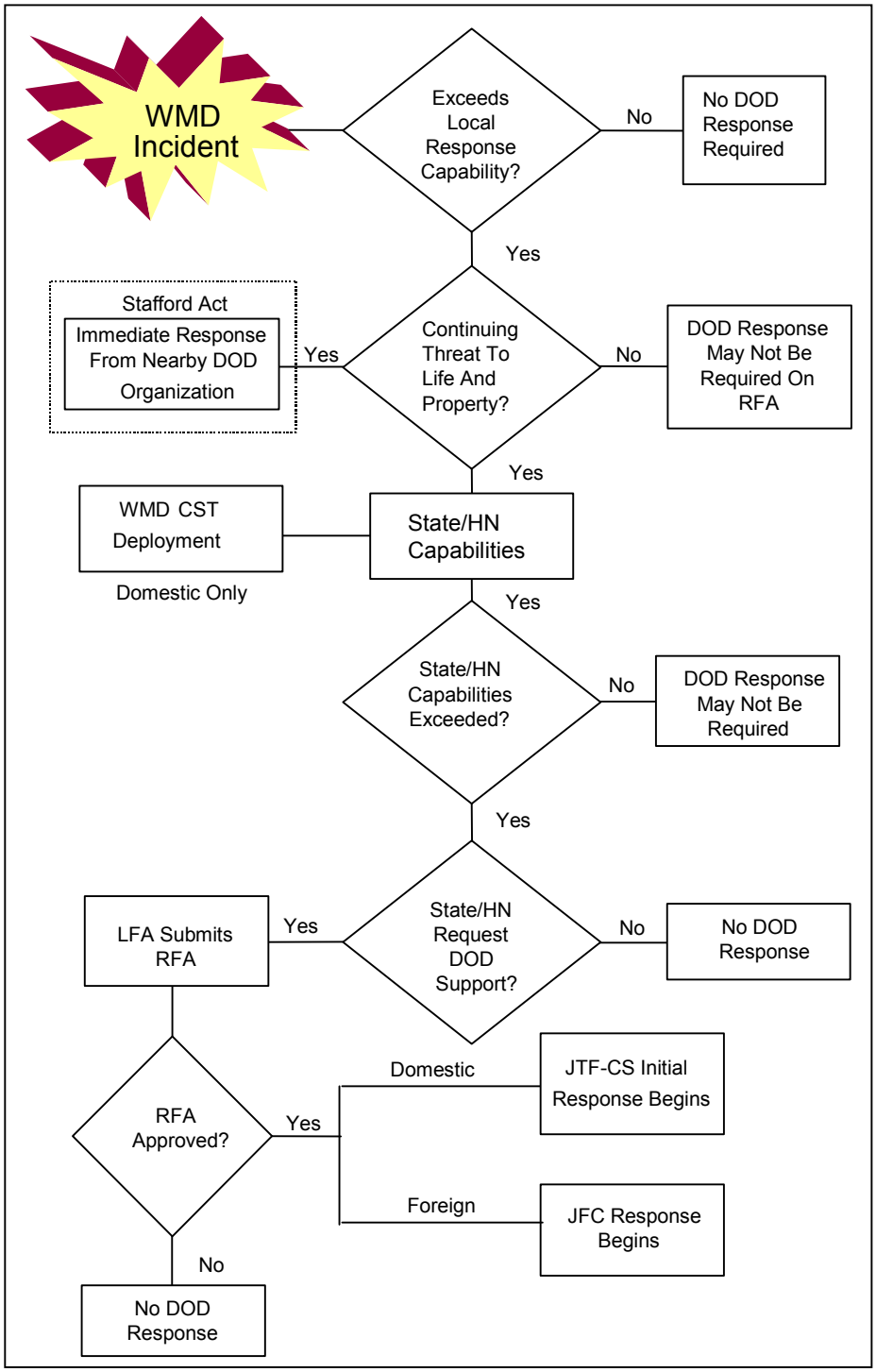

Figure IV-1. Graduated-Response Overview

2. Notification

Notification begins when an incident report is submitted. Notification of the event triggers a potential immediate response under the Stafford Act. Subsequent notification of an approved FEMA RFA triggers the domestic response provided by DOD. Furthermore, unit-level or national notification could occur.

a. Unit-Level Notification. All DOD personnel should be trained to notify the chain of command and proper authorities of a suspected incident. Typically, units would use an emergency net to notify fire and medical personnel, security forces, and response elements.

b. National Notification. According to applicable directives, commanders submit reports and follow-up reports (as required) (where national-level interest has been determined) directly to the National Military Command Center (NMCC).

3. Common Responsibilities

General on-scene tasks include detection, assessment, and containment. These tasks must be accomplished deliberately, but with caution and safety. The senior on-scene official would assume control of the incident site and ensure the safety of the responders. Responders will—

a. Approach the incident area with care from upwind or crosswind, maintaining a safe distance from the site. If NBC materials are suspected, detected, or identified, ensure that the appropriate notification and reporting requirements are met. Treat the incident site and area as a crime scene.

b. Be aware of warning signs indicating the presence of lethal agents or potential hazards.

c. Be aware that incidents may be masked by a hostage situation, a disgruntled employee, protests, or accidents.

d. Notify the FBI for domestic incidents or the DOS for foreign incidents. While the FBI or the DOS assumes jurisdiction for the investigation, the installation commander provides the initial and immediate response to any incident occurring on an installation in order to isolate and contain the incident. In all cases, the command of military elements remains within military channels.

e. Begin determining the nature of the incident. If no detection capability exists, the first responders continue response operations safely. They observe signs and symptoms to further define the hazard until a follow-on team with detection capability (or other coordinated support) arrives. If follow-on forces are required, the first responders remain on site to alert follow-on forces to the extent and the characteristics of the incident.

4. Immediate Response

a. The DOD policy for an "immediate response" authorizes military commanders to respond to civil authorities' requests for emergency military support. It gives the commander the authority—

- To support an incident response without formal activation or direction when immediate serious conditions exist and time does not permit prior approval from higher HQ.
- To save lives, prevent human suffering, or mitigate great property damage under immediate serious conditions where there has not been a Presidential declaration of a catastrophe, a major disaster, or an emergency. The policy is based on the Stafford Act.

b. While the policy allows for an immediate response, it requires commanders to advise the DOD executive secretary through command channels by the most expeditious means available and seek approval or additional authorizations as needed. Although an immediate response can be provided on a reimbursable basis (if possible), it will not be delayed or denied because of the inability or unwillingness of the requester to make a commitment to reimburse the DOD. Commanders must exercise extreme caution if electing to deploy under the auspices of an immediate response. While this policy allows for great flexibility, commanders ensure that immediate-response deployment authority is used as a last resort. The SECDEF's approval is required for DOD forces to respond to terrorist or WMD events.

c. The OSC will exercise C^2 of the immediate-incident scene, unless responding to an off-installation event where the civilian incident commander will accomplish C^2. DOD forces responding to an off-installation event are generally in a supporting role and will not take control of the situation from the LFA or the incident commander. Based on the severity of the incident, first responders may require follow-on response elements from other locations. The OSC may request follow-on elements from the various functional and technical areas, depending on the situation.

d. Follow-on response elements stage at an assembly area. The initial assembly point is a safe distance from the incident site to prevent interference and to protect personnel. If needed, the unit coordinates for follow-on resources. Response-force elements review both their individual and functional-area responder checklists.

5. Critical Response Tasks

Responders will be working with other agencies and must be aware of the protection measures being used at the incident site. Critical response tasks could include the following:

a. Initiating Protective Measures. Responders will use the appropriate level of protective gear. Only those personnel trained and qualified in using the selected level of protective equipment will be allowed within the hot zone.

b. Initiating Detection/Assessment. If the OSC does not have appropriate detection capabilities, he will develop incident information using signs and symptoms, as well as personal observations and interviews of casualties or personnel within the immediate area. Until adequate detection and identification capabilities are on scene, the OSC uses worst-case risk assessments. Included in the risk assessment should be consideration for the potential of secondary devices, to include chemical, biological, radiological, and explosive devices. When the threat data is known, analysis of the geographic extent of the risk and its consequences can be calculated locally or at a remote analysis center and conveyed to local command/management authorities.

c. Containing the Threat. Before any rescuers enter the hot zone, the senior on-scene official determines the safety zones based on hazard risk assessment. The security forces establish a perimeter and control access to the site by establishing an entry control point (ECP), which will serve as the sole entrance and exit from the incident site. Only personnel with verified authorization are permitted to enter the incident site. To contain the threat, critical requirements include—

- Response elements (if capable) to establish decontamination lanes (for both victims and responders); the lanes must be properly equipped and staffed by adequate numbers of qualified personnel.

- Medical personnel to ensure that personnel donning entry suits receive preentry physical screening.

- Civil authorities and personnel to operate and protect critical civilian infrastructures and systems (e.g., public utilities and medical facilities).

- Security forces to institute a personnel accountability system using identification such as badges, hats, armbands, and vests.

- The OSC to establish and maintain communications between the incident site and site installation CP.

- Responders to begin stabilizing the incident and limiting its impact.

6. Initial Response

a. Domestic. DOD resources would likely be requested in support of a federal response to a domestic WMD incident. Requests for DOD support originate from civilian authorities in the aftermath of a WMD detonation or release. An approved RFA from FEMA is required to trigger a response from the JTF-CS (refer to JP 5-00.2). When requested through appropriate channels, the DOD makes resources available to assist local, state, or federal authorities in response to a WMD incident.

(1) Upon appropriate notification, a JTF HQ deploys to support the LFA that is tasked with managing the coordinated federal response to a WMD incident. The JFC is normally delegated OPCON of DOD forces assigned to the mission. The JTF commander is the DOD operational commander on scene for CM actions in support of the LFA.

(2) Upon activation, the JTF provides a response capability, establishes liaison with military elements, supports crisis-management and CM operations associated with a WMD incident, and conducts requisite predeployment and deployment actions.

(a) Predeployment. During crisis-action planning, the JTF advance survey party moves to the vicinity of the incident to coordinate with the LFA, the state's EOC, and the on-scene response element. In addition to providing liaison officers, the JTF, with the DCO and the DCE, begins to plan and coordinate military support with FEMA. The advance survey party identifies mission requirements, as coordinated with the LFA. Based on mission requirements, the advance survey party establishes the main-body reception center/base.

(b) Deployment. Once established, the JTF is normally delegated and maintains OPCON of designated DOD forces responding to the WMD incident. The DCO and the DCE function as part of the JTF and lend expertise to CM planning and coordination. Once staged, the JTF executes the mission in support of the LFA.

b. Foreign. In a foreign scenario, the HN may request assistance through the DOS, which becomes the LFA responsible for requesting DOD support. To support a foreign scenario, a JTAC may be deployed.

(1) The JTAC Concept. A number of geographic combatant-commander assigned forces, service assets, and defense agencies exist to respond to various aspects of WMD CM. However, no single organization possesses the comprehensive CM capabilities required to address the spectrum of issues of a WMD incident.

(2) The USJFCOM as a Joint Force Provider. Based on the Chairman, Joint Chiefs of Staff Instruction (CJCSI) 3214.01, the USJFCOM is tasked to identify, coordinate, exercise, and—upon NCA directive deploy a joint cadre of technical experts—advise and assist geographic combatant commanders to conduct CM operations. The JTAC provides a single-source mechanism, which is dedicated to the needs of the supported geographic combatant commander. The USJFCOM defines the joint cadre through an implementation plan describing organization, C^2 relationships, forces, notification sequence, deployment timing, and exercise support. The cadre is composed of CONUS-based unified commander and service assets. When directed by the NCA, the USCINCJFCOM deploys specialized CONUS-based assets to augment the geographic combatant command's organic assets.

(3) The JTAC Initial-Reaction/Deployment Process. After an incident or when a credible threat exists of an NBC-related event, the geographic combatant commander identifies the need for technical expertise to augment his staff to assist in planning for CM operations in support of the HN. The supported geographic combatant commander requests through the SECDEF that the JTAC be deployed. Upon NCA approval, the SECDEF directs the USJFCOM to deploy the JTAC. The USJFCOM JOC receives notification of a deployment order and notifies the various members of the JTAC. The USJFCOM assists in coordinating transportation for the members of the JTAC to the supported geographic combatant commander's HQ.

(4) The JTAC's Composition. The JTAC's composition could include SMEs and response assets from several organizations. The organizations that could be tasked to provide personnel might include the following. (For more information on JTAC support elements, see Appendix D.)

- USMC's CBIRF.
- US Army Soldier Biological and Chemical Command's (USASBCCOM's) CB-RRT.
- Defense Threat-Reduction Agency (DTRA).

7. Response-Execution Considerations

The JTF's objectives are safeguarding lives, preserving health and safety, securing and eliminating the hazard, protecting property, preventing further damage to the environment, and maintaining public confidence in the government's ability to respond to a WMD incident. Responding forces initiate actions to restore conditions at and in the vicinity of the incident site. During this stage, the JTF develops a transition plan and a redeployment plan. The DOD response phase ends when civil authorities or other designated agencies are self-supporting and approve the release of the JTF. Additionally, to support the primary objectives of the JTF, key areas such as information management, logistics, technical support, public affairs, communications, safety, medical support, and public works are addressed.

a. Information Management. During the initial response phase (that includes predeployment and deployment), IM is critical to maintaining effective C^2 and coordination. IM tools provide the commander with the input needed to support incident visualization and decisions making.

b. Logistics. The logistics process facilitates the obtaining, maintaining, storing, moving, and replenishing of resources used in responding to a WMD incident. For example, transportation support is required to move assets, both human and materiel, in response to a WMD incident. This includes the ability to protect the transportation means and the operators during the response support. Elements of the sustainment process used to support an incident include contracting, negotiated support, military support, or support from other federal agencies.

(1) Contracting. Contracting, purchasing, renting, or leasing supplies or services from nonfederal sources are effective and efficient ways to provide support in a crisis. Included are all classes of supply or maintenance used in a WMD response situation. During the initial stages of an operation, contracting officers are required to procure supplies and services.

(2) Negotiated Support. In some cases, civil authorities have enough logistical resources to support not only themselves but also the military providing assistance. For example, civil authorities may provide housing, food, and fuel to JTF assets. Such support is negotiated on a case-by-case basis with the civil authorities.

(3) Military Support. Installations continue habitual relationships with units. Installations may also have to support personnel with whom they have no established support relationship. These personnel include civil authorities and elements from other services. If an installation or other sources discussed below cannot provide the required support directly, planners tailor a support force.

(4) Support From Other Federal Agencies. Federal agencies such as the General Services Administration (GSA) provide support to civil authorities. GSA provides general supplies and services that are common to more than one department of the federal government. While GSA can provide an extensive amount of support to the DOD, other federal agencies and organizations provide assistance depending on the nature, scope, and duration of the operation.

(5) Other. Special events package (SEP) containing caches such as decontamination, detection, and medical equipment may be pre-positioned as part of a preparedness program. This equipment can be transported by air and ground on a short notice and is available for use by both civilian responders and JTF elements.

c. Technical Support. The JTF staff conducts liaison and coordination and receives reports to remain updated on key operational, personnel, and logistical information. The JTF staff uses this information to support several tasks. These tasks include—

(1) Preparing reports, assessments, vulnerability analyses, and hazard predictions.

(2) Monitoring the augmentation of civilian and military NBC response elements.

(3) Maintaining incident information boards that include the following: event situation, event casualty and damage summary, weather and evacuation status, area closing and shelter facility status, resources status, hospital-bed availability, contracts and agreements, and incident logs.

(4) Collecting, processing, and disseminating information about the WMD incident to other elements.

(5) Preparing employment strategies for the separate WMD response elements.

d. Public Affairs. The principal PA objectives are to ensure that accurate information is provided to the joint information center (JIC) and communicates a calm, measured, and reasonable reaction to the ongoing incident. The PAO prepares draft media releases and conducts briefings (as required). The PAO stays fully apprised of the situation as it develops. Experience has shown that by bringing in media early under reasonable conditions, credibility is maintained and freedom of information is preserved.

e. Communications. C^2 communications systems must incorporate telecommunications, data-transfer, cell phone, and simultaneous phone-line capabilities and be secure and satellite based. In addition, communications systems should be

independent of military switching and stand-alone systems so that competing communications requirements (e.g., civilian systems and military systems) will not interfere with incident communications requirements. A crucial aspect of the response plan is establishing and controlling communications among the forces in the incident area, the operations center, and the various response elements. Communications elements respond to changing needs during the incident and maintain over a period, control of all incoming and outgoing communications as well as the communications channels. The commander ensures that adequate warning means, response and management means, nets, frequencies, equipment, and redundancies are available to link the efforts of all (internal and external) incident response elements. Separate nets are established for the command net and the security net. Nonoperational traffic communicates via landlines or cellular telephones.

f. Safety. The JTF staff and its assets support the incident commander with continuous updates. For example, tools such as the site safety plan are kept updated to ensure the safety of responders and citizens. Site safety considerations that the JTF staff monitor include—

(1) Analyzing the hazards at the incident site and conducting a risk analysis of those hazards.

(2) Maintaining and updating the site map or sketches.

(3) Updating the site work zones (hot, warm, and cold).

(4) Monitoring decontamination-area operations.

(5) Ensuring that the site communications diagrams remain updated.

(6) Updating information on the location of CP(s) or command centers.

(7) Maintaining and updating hazard-monitoring overlays and results.

g. Medical Support. Following an incident, health-services support includes providing selected health and medical care, as required, and augmenting local support capabilities. Large numbers of casualties in short periods of time can compromise both the quality and quantity of health care and constrain mobility and evacuation. Coordination by the JTF staff with HN, state, and/or local medical facilities is necessary to ensure that medical plans include procedures to treat and care for contaminated or infected personnel (see Figure IV-2). PVNTMED specialists and pathologists need a database of naturally occurring diseases and procedures to quickly assess and identify suspicious illnesses and diseases. Medical teams require special training in the identification, treatment, and handling of contaminated casualties and remains. Medical facilities have areas designated to treat and segregate contaminated patients. While decontamination of nonambulatory casualties is performed before evacuation, many casualties, during a terrorist incident, will self-evacuate, arriving at the hospital still contaminated. Hospitals should have the capability to detect contamination and to decontaminate. Antidotes and treatments for potential agents from commercial or industrial sources are considered in the casualty-management plan and stockpiled based on threats. Contaminated-patient transport and

contamination-control measures are incorporated into litter and ambulance operations. Planners coordinate the establishment of the on-site medical-treatment area.

h. Public Works. DOD CM assets support the local public works to ensure that facilities remain operational or critical infrastructure damage is remedied or mitigated. Selected support measures that assist public works personnel may include—

(1) Helping to establish plans for the hazard area and disposal of hazardous waste.

(2) Supporting the production, transportation, maintenance, and medical monitoring of potable water supply.

(3) Deploying damage assessment teams.

(4) Providing power sources and water for on-site decontamination.

(5) Providing backup power to the incident site.

(6) Assisting with hazard containment.

(7) Providing environmental expertise and technical assistance.

(8) Providing emergency clearance of debris for passage of emergency personnel and equipment.

CHEMICAL-CONTAMINATED PATIENTS

INTRODUCTION. Hospital medical-emergency-department (ED) staff caring for patients contaminated with toxic chemicals are at risk for developing toxicity from secondary contamination.

SITUATION. On April 11, 2000, a 40 year-old man intentionally ingested approximately 110 grams of a veterinary insecticide concentrate. On clinical examination at a local hospital ED (approximately 20 minutes after the ingestion), the patient had profuse secretions, vomiting, and respiratory distress. He was intubated for airway management and ventilation. To control secretions, he received pralidoxime and atropine.

The patient was brought to the ED by a friend, not by emergency medical services, and the friend also developed symptoms that required treatment. ED personnel exposed to the patient had symptoms within an hour of his arrival. The staff noted a chemical odor in the ED and contacted the regional poison center, which recommended decontaminating the patient's skin and placing the gastric contents in a sealed container to minimize evaporation; however, no decontamination was performed.

During this incident, health-care workers were exposed to a patient contaminated with an organophosphate insecticide. These health-care workers were not wearing appropriate respiratory or skin protective equipment while caring for the patient. As a result, three health-care workers developed symptoms consistent with organophosphate intoxication and required treatment.

For example, one health-care worker providing care to the patient developed respiratory distress, profuse secretions, emesis, diaphoresis, and weakness. She had contact with the patient's skin, respiratory secretions, and emesis. She was admitted to the hospital and required intubation for 24 hours to support respiration. After medical management and serial doses of atropine and pralidoxime for 7 days, her respiratory function improved, and she was discharged after 9 days of hospitalization.

SUMMARY. Depending on the extent of the contamination, health-care workers for chemically contaminated patients should use level C protection (i.e., a full-face mask and a powered/nonpowered canister-/cartridge-filtration respirator) or level B protection (i.e., a supplied-air respirator or a self-contained breathing apparatus). To prevent dermal absorption, chemical-barrier protection appropriate to the contaminant is needed; latex medical gloves are of little protection against many chemicals. In addition to the need for surface decontamination of patients, body fluids also must be contained to prevent dermal and inhalation exposure. To limit the distant spread of the contaminant, the EDs ventilation exhaust should also be directed away from the hospital's main ventilation system.

Figure IV-2. Emergency-Department Treatment of Contaminated Patients

Chapter V

RECOVERY, TRANSITION, AND REDEPLOYMENT

1. Background

Recovery, transition, and redeployment operations start when civil authorities or other designated agencies relieve the JTF commander of selected CM tasks. The operational duration of the response mission is determined by the requirements established by the appropriate authority (the LFA for domestic operations or the HN/DOS for foreign operations). There is not an established timetable. A transition plan is implemented and CM tasks are transferred from the JTF commander to the appropriate civil authorities (i.e., the DOS, FEMA) commensurate with their ability to continue to conduct operations. NGOs and/or contracted services may augment these civil authorities. Upon completion of the required recovery support, the JTF commander executes transition and redeploys.

2. Recovery Operations

a. Start the Recovery Phase. The recovery phase begins when the immediate hazards are contained or controlled to the point that military assets are replaced or are no longer needed. During the recovery phase, emergency-response elements initiate the action to restore conditions at and in the vicinity of the incident site to a technically feasible and acceptable state. During the recovery phase, the response commander will facilitate the orderly transition of C^2 and conduct the withdrawal of military forces from the incident site when the capabilities and services of the response elements are no longer required.

b. Develop and Implement a Mission-Recovery Plan. This plan must be coordinated with civil authorities to determine the requirements. Clearly defined goals and objectives ensure that tasks between civil authorities and JTF commanders are understood and completed. Top priorities are reestablishing mission capability, developing a plan to cover short- and long-term recovery requirements, and returning to normal operations. Special consideration is given to minimizing and mitigating environmental damage. The mission-recovery plan can address the following areas:

(1) Logistical support and resupply.

(2) Force protection.

(3) Documentation and reporting requirements, to include resource expenditures, losses, and environmental-exposure data that is necessary to estimate exposure (to determine long-term and short-term health effects).

(4) Decontamination.

(5) Environmental considerations to prevent pollution and restore the area.

(6) Medical issues to include:

- Personal protection.
- Casualty-handling operations.
- Medical screening and documentation and critical-incident stress management.
- PA activities.
- Liaison with federal, state, local, and HN officials as required.

3. Transition

a. Transition in CM operations involves the transfer of responsibilities and functions to other organizations. Transition occurs between units, to the civil authorities, or to local or HN agencies. Transition and/or termination is initiated once objectives are met and authority is given from national decision makers.

b. If DOD forces are transitioning functions between units, then the transition requirements follow standard military handover procedures. If transition involves the transfer of DOD forces' functions or areas to the civil authorities or to local or HN agencies, then the mechanics of the transition will reflect operational procedures and existing agreements.

c. A transition plan helps the staff identify transition issues in relation to the desired or projected end state. It is especially important to identify those parties or agencies that will receive functional responsibilities from the JTF commander. Considerations include which staff sections will write annexes, based on what the transitioning organization will do. The transition plan should identify organization, operating procedures, and transition recommendations and considerations. When implementing the transition plan, the transitioning parties should discuss criteria for transferring operations. The plan should be unclassified, clear, and concise—using terminology appropriate to all parties.

(1) Transitioning may be by function or by specific areas of the incident site. The transition process should be event-driven and not tied to calendar dates. Functions or areas transfer only when a similar capability becomes available or is no longer needed. Procedures for the transfer of equipment or supplies—either between DOD units, to civil authorities, or to local or HN agencies—must be established according to regulation and command guidance.

(2) Planners identify other key transition factors within functional areas that may include logistics, medical services, communications, security, and technical services. Planners should develop a series of transition criteria to monitor progress; the important part of choosing indicators is to have a consistent method by which to measure progress during the transition.

4. Redeployment

a. Simultaneous with deployment, the JTF commander begins planning redeployment. Redeployment decisions are based on civil and military considerations. Redeployment begins as soon as objectives are accomplished or the need for military forces diminishes. Redeployment planning should follow normal guidelines and protocols. Careful consideration should be given to what physical assets can be safely removed from the incident and which should be contained or controlled and whether or not it should be left at the incident site.

b. Redeployment includes the use of the AAR process to help evaluate mission and task performance. The AAR addresses the following:

(1) What was the original mission? How was it stated, and how was it interpreted at the various levels of command?

(2) What should have happened (e.g., the mission or plan)? What actually happened (e.g., a description of the event)?

(3) How it happened (e.g., key facts that led up to the event)?

(4) Why it happened (e.g., inferences about probable causes)?

(5) How to improve performance next time (e.g., alternative courses of action)?

5. Documentation

During a response, incoming/outgoing data (questions and responses) should be captured and archived so that when personnel review the data later, they can be confident that it is complete and accurate.

a. After conducting a response mission, the JTF addresses two areas: documenting lessons learned and identifying what can be termed as after-operation follow-up. Key areas of documentation include personnel and equipment expenditures or costs, incident event logs, and medical documentation for response personnel.

b. Lessons learned should be collected and then consolidated in the Joint Universal Lessons Learned System (JULLS) format, if possible, or through individual service systems such as the US Army's Center for Army Lessons Learned (CALL).

c. It is in the postemergency period that documentation of the incident occurs. Actions that occurred during the notification, response, and recovery phases will be critical to providing answers to the questions that will be asked (i.e., in areas such as fiscal/resource management, medical surveillance, medical treatment, mortuary).

d. Accurate record keeping also addresses the monitoring of DOD response-element personnel for long-term health problems that could be incident related.

Chapter VI

EDUCATION AND TRAINING

1. Overview

JP 3-07 outlines a two-pronged approach of general professional military education for all officers and noncommissioned officers. Education and training should encompass general awareness and specific functional AORs. Competency is developed through institutional education, training, practical exercises, and simulations. Training should be conducted with other organizations and civilian agencies that would be involved in CM operations.

2. Education

CM operations need to be emphasized in appropriate programs of instruction. For those military units without experience in civilian CM exercises on a local, state, regional, or national basis, limited opportunities exist to incorporate lessons learned from these events into the training environment such as institutional education, simulations, and exercises. Commanders should educate all personnel in basic CM awareness, with more specific operational instruction for personnel assigned CM tasks and responsibilities. Numerous courses and training opportunities are available from various government and private sources. A compendium of these resources is available from FEMA. Some of the educational opportunities available are in the following areas:

a. General Awareness.

(1) Force Protection/Antiterrorism. One component of combating terrorism includes defensive measures against terrorist attacks. All personnel train on the fundamentals necessary to defend installations, units, and individuals against terrorist attacks. AT is a FP measure and is the responsibility of commanders at every level.

(2) Overview of CM Operations. Based on the roles and responsibilities of the audience, this may include the fundamentals of the FRP, the ICS, and service-specific issues.

b. Specific Operational Education.

(1) Command and Staff.

- The role of the action agency and LFAs.
- Legal authorities, constraints, and limitations.
- Logistics and support requirements, including fiscal reimbursement issues.
- C^2 structures.

- The role and function of the DCO and other DOD liaisons.

NOTE: An example of this type of training is the DOD Emergency Preparedness Course. This course prepares emergency preparedness liaison officers (EPLOs), DCOs, and staffs to plan and execute joint military operations that support civil authorities responding to domestic emergencies and disasters. The US Forces Command offers the course eight times a year at the FEMA Mount Weather Emergency Assistance Center, Berryville, Virginia, and conducts mobile training teams within the USPACOM's and the US Southern Command's (USSOUTHCOM's) AORs each year. This training is authorized by DODD 3025.1.

(2) Technical and functional areas.

- HAZMAT operations.
- Reconnaissance and survey.
- Decontamination.
- Casualty handling.
- Medical operations.
- Communications.

NOTE: Examples of functional-area courses are the Environmental Protection Agency's (EPA) Emergency Response to HAZMAT Incidents; the National Fire Academy (NFA) HAZMAT Operating Site Practices; and US Army Medical Research Institute of Chemical Defense (USAMRICD)/US Army Medical Research Institute of Infectious Diseases (USAMRIID) Field Management of Chemical and Biological Casualties and the Medical Management of Chemical and Biological Casualties.

(3) Disaster Assistance. FEMA and other government agencies provide numerous resident and nonresident training courses related to disaster-assistance operations. Personnel assigned duties such as EPLOs or SCOs benefit from familiarity with such training.

3. Training

Training opportunities exist both internally and externally and should include—

a. Individual, collective, and unit training.

b. Initial and sustainment training.

c. Intraagency and Interagency training.

4. Exercises

Exercises provide the opportunity to interact with other units or services and federal, state, or local agencies. Exercises developed by non-DOD agencies provide an opportunity to improve military capabilities for support of CM operations with minimal resources. These exercises emphasize interoperability requirements and stress staff coordination. They also serve to identify shortfalls in communications or other capabilities that must be corrected.

5. Simulation and Modeling

Distributed simulations provide training technology that permits multiple organizations or agencies to participate in the same simulation exercise from remote locations. JTFs and other units involved with CM operations can use simulations such as the hazard prediction and assessment capability (HPAC) to help portray various scenarios. This includes training in the organization and processes of supported civilian agencies.

6. Rules of Engagement

Situational-training exercises provide deploying forces with training on events and circumstances they can expect to encounter during CM operations. By reviewing lessons learned and AARs of similar operations, leaders can identify likely situations that their units can expect. Unit leaders prepare the proper response based on the rules of engagement (ROE), applicable lessons learned, policy directives, instructions, regulations, doctrine, tactics, and legal advice for each situation and train personnel accordingly. This response becomes an immediate action drill and should be published and well rehearsed by members of the deploying force. Standing ROE should be published as part of the CM training process.

7. Public Affairs

Personnel in units conducting CM operations benefit from familiarity with PA principles and procedures. CM operations are of great interest to the news media, and units are aware that PA releases are conducted through the JIC. Commanders accomplish their mission under close scrutiny of the media. They have to react rapidly to developing issues and changing perceptions while simultaneously fulfilling the information needs of their troops. An additional training resource is the National Response Team (NRT) JIC Manual. The NRT JIC Manual provides guidance for establishing and organizing a JIC.

Appendix A

CONTAMINATION-AVOIDANCE TACTICS, TECHNIQUES, AND PROCEDURES

1. Background

This appendix addresses preparedness (i.e., understanding the IMS) and response measures such as detection, marking, and contamination control that could support a possible military response to an NBC incident.

2. Preparedness

During peacetime, units and installations undertake measures (i.e., contamination-avoidance measures, drills and exercises to support crisis-management and CM preparation) to decrease vulnerability. This is part of an integrated approach to an overall unit/installation AT/FP program/plan; a key element in developing an integrated AT/FP plan includes understanding the civilian IMS and being aware of where and how the IMS process may influence response actions by military units.

a. Key information about the IMS's command and staff structure (i.e., incident commander; operations, plans, logistics, and administration sections; IC special officers; and safety, liaison, and PA) is important as a preparedness measure in understanding the responsibilities and functions at an incident site.

(1) Incident Commander. The incident commander is responsible for managing incident operations. His decisions (i.e., establishing a protection level) can directly impact military response elements. His directives support accomplishing major tasks such as—

- Establishing control of the incident scene.
- Ensuring the safe approach and positioning of emergency-response resources.
- Establishing staging as a method of controlling arriving resources.
- Establishing a security perimeter.
- Establishing hazard-control zones to ensure a safe work area. Factors that influence the size of hazard-control areas and the establishment of protective levels include considering whether an oxygen-deficient atmosphere exists (i.e., an atmosphere immediately dangerous to life and health [IDLH] contains 19.5 percent oxygen or lower); flammability (i.e., if dealing with an open-air release, the initial action level can be 20 percent of the lower explosive limit); radioactivity; and toxicity (i.e., guidance may indicate to use an estimated IDLH of 10 times the threshold-limit value/time-weighted average if there is no published IDLH or to use IDLH or short-term exposure-limit values).

- Assessing the need for immediate rescue and implementing public protective actions.

(2) Operations Section. The operations section manages and controls all on-scene tactical operations. This control will generally include the responsibility for supervising HAZMAT branch operations. Specific HAZMAT branch-related tasks can directly impact the where and when of military unit support. Functions can include the following:

- Site-control operations. Establish control zones and monitor access routes at the incident site.

- Decontamination operations. Develop, setup, and operate a decontamination area.

- Entry operations. Perform entry and backup operations within the hot zone to include reconnaissance, monitoring, sampling, and mitigation.

- Medical operations. Perform preentry and postentry medical monitoring and evaluation of all entry personnel and provide technical medical guidance.

(3) Plans Section. The plans section is a critical element for support of the IMS process. An effective flow of information is critical at an incident site for all parties. Responsibilities include—

- Collecting, evaluating, and disseminating incident information.

- Maintaining information on the current and forecasted situation.

- Maintaining information on the status of resources assigned to an incident.

- Preparing and documenting action plans.

(4) Logistics Section. The logistics section is another critical coordination point for military units. Military units may rely on local resources for site-support services, and the logistics section may coordinate service, communications, food, and facility support.

(5) Administration/Finance Section. The administration/finance section supports the IMS process by getting funds where they are needed and ensuring that financial controls are in place.

(6) Command and Staff Officers. The following officers are appointed by and report directly to the incident commander. These include the safety officer, liaison officer, and public information officer. Supporting military units must also understand the roles and responsibilities of these personnel to help ensure effective and efficient communications.

- Safety Officer. The safety officer is responsible for monitoring and assessing safety hazards and unsafe situations and developing measures for ensuring personnel safety. Assistant safety officers, such as the HAZMAT safety officer, may also be designated and have the authority to stop any activity that poses an imminent danger.

- Liaison Officer. The liaison officer serves as a coordination point between the incident commander and any assisting or coordinating agencies not involved in the UC structure that have responded to the emergency. The liaison officer is the point of contact for all assisting and coordinating external representatives who are not represented within the UC structure.

- Public Information Officer. The public information officer coordinates all media contact and activities during an emergency, assembles and prepares all news information and press releases, and establishes communications with all representatives and agencies.

b. Other preparedness actions can take many forms. Possible measures could include:

(1) Conduct of NBC threat-vulnerability assessment.

(2) Integration of efforts with other USG agencies, including applicable law enforcement and intelligence organizations. Commanders also assess the criticality of key infrastructure essential to functions such as staging and deploying operations.

(3) Coordination of commanders with civilian authorities and agencies to ensure that applicable measures such as Mutual Aid Agreements are in place to ensure a fully coordinated response.

(4) Actions to further reduce vulnerability may include—

- Enforcing operational security.

- Maintaining emergency NBC-response plans.

- Identifying FP capabilities and capability redundancy.

- Monitoring and analyzing public health information.

- Maintaining NBC defense equipment, to include medical supplies.

- Conducting joint and interagency planning (i.e., coordinating with FEMA and DOS).

- Assessing response elements' (active and reserve) certification for crisis-management or CM operations.

c. Constraints that confront overall preparation include the following:

(1) Military operating base and civilian community (foreign and/or domestic) populations often lack the training and equipment necessary to survive should an incident occur. First-responder elements (i.e., medical, law enforcement, fire fighters, HAZMAT, emergency planners, etc.) require training to ensure they do not become casualties when responding to an incident. Responder elements need the required level of realistic, integrated training (awareness, HAZMAT technician, etc.) to protect themselves so that they are able to contain an incident. For example, awareness-level first responders need an individual protection capability, and HAZMAT response teams need an immediate response capability to be able to conduct actions such as saving lives. Tactical plans on how to deal with these challenges also need to be developed and exercised.

(2) Much of the infrastructure that is a potential target is not hardened. Most of the structures in key facilities are not designed to withstand blast damage or the pervasive nature of a lethal CB-agent aerosol cloud.

3. Response Measures

Response measures include those actions needed to detect, assess, and contain an incident. These actions help avoid, control, or mitigate NBC hazards.

a. Detection. Detection includes both preincident defensive actions and incident actions. Preincident measures could include defensive measures taken by an installation to help reduce the probability of an incident. Detection primarily involves incident-related actions. Initial response begins with incident reporting by an observer and provides the commander/incident commander with information on contamination hazards and clean areas. Responders should be aware that standard military NBC detection equipment will not detect the presence of many toxic agents. Reliance on reported information and visual indicators (both positive and negative) from the site may be the sole indication that a toxic environment exists.

b. Assessment. Assessment is a continuing process throughout any incident. The situation must be quickly evaluated to determine the response objectives based on available incident-response capability. Information such as the type of incident, probable size of the affected area, and physical or environmental conditions must be reported. Using available emergency communications, notify concerned personnel of the hazard. Actions besides warning and reporting (and associated alarms and signals) include contamination marking and hazard prediction.

(1) Initial information on the type of incident and actual on-the-ground conditions must be received, analyzed, and disseminated. This information is crucial to support many key functions. Among these is deciding what areas should receive instructions on whether to evacuate or to seek shelter in place.

(2) Assessment-decision support tools may also help to identify possible locations of hazards at an incident site or locate populations within a community potentially affected by hazards. This information is intended to give an estimate of the

extent and location of the area that might be placed at risk by a particular HAZMAT release. Specifically, reference guides such as the Department of Transportation (DOT) 2000 North American Emergency Response Guidebook provides information on determining protection distances for TIC and select CW agents. This type of hazard analysis uses assessment-decision support tools to support maintaining improved situational awareness.

c. Containment. Response elements provide the capability to reduce or isolate an incident in order to mitigate or prevent further risk or damage to persons, materiel, facilities, and the environment. Contamination-control measures include leaving equipment in a contaminated area until it is monitored for contamination. Other contamination-control measures include encapsulating contaminated items by qualified personnel or covering the equipment with plastic bags or tarps.

(1) Survey elements will help ensure that the incident site is treated as a crime scene by setting boundaries and cordoning the site. Setting boundaries facilitates strict control into and out of the hot zone.

(2) DOD assets (in a CM role) will likely not have to conduct containment actions such as establishing control zones but may support verification of existing boundaries. Control zones are operational areas established at a WMD incident site within which only specific types of operations are conducted. Personnel working in these areas must adhere to strict procedures to ensure the safety of those working in the zones. Control zones are established to ensure the safety of all responders and control access into and out of a contaminated area. The three zones established at a WMD incident site are known as the hot zone, the warm zone, and the cold zone.

- Hot Zone. The hot zone is an area immediately surrounding an incident, which extends far enough to prevent adverse effects from the device/agent to personnel outside the zone. The hot zone can also be referred to as the exclusion zone (EZ), real zone, or restricted zone and is the primary area of contamination. The hot zone is the area that the incident commander judges to be the most affected by the incident. This includes any area to which the contaminant has spread or is likely to spread. Access is only permitted to personnel who are properly trained and protected. The incident commander sets the parameters of this zone after giving consideration to the type of agent, the volume released, the means of dissemination, the prevailing meteorological conditions, and the potential effects of local topography. ICS priorities within the hot zone may include conducting rescue and search, performing mitigation, and identifying WMD or other physical obstacles to the entry point. The hot zone is also the location where contamination reduction begins.

- Warm Zone. The warm zone (also known as either the decontamination zone or the contamination-reduction zone) is an area immediately surrounding the hot zone, which could become contaminated due to ongoing operations. The warm zone is the area between the hot and cold zones where personnel and equipment decontamination and hot-zone support take place. It includes control points for the access corridor and thus assists in reducing the spread of contamination. It is an operational area safe from downwind exposure and includes the bulk of the decontamination assets where survey-team and

equipment decontamination is accomplished. Access control points connecting the hot and cold zones are established. The warm zone can also be referred to as the contamination-reduction corridor, yellow zone, or limited access zone.

- Cold Zone. The cold zone, or the support zone (SZ), is the area outside the warm zone where there is no contamination present. The cold zone is the area where the CP and support functions that are necessary to control the incident are located. The same basic considerations that are used for the hot and warm zones influence the extent of the cold zone. The cold zone must be readily accessible and provide the means for safety and rest. It must also be large enough to accommodate local, state, and federal WMD response forces (if required) and to serve as the staging area for personnel and equipment. The operational priorities of the cold zone include providing C^2 for operations being conducted in the warm and hot zones and ensuring that there is an area of security for emergency personnel and response forces conducting operations. The cold zone can also be referred to as the clear zone, green zone, or SZ.

4. Summary

In summary, this phase of the operation involves a myriad of contamination-control measures. The follow-on critical actions that need to be quickly implemented include protection and decontamination. More detailed information is included on these topics in Appendices B and C.

Appendix B

PROTECTION—INDIVIDUAL AND COLLECTIVE

1. Individual Protection

Military individual protective equipment is designed to protect personnel from NBC agents in a combat environment but provide limited protection from hazards other than NBC weapons. Civilian response personnel use the Occupational Safety and Health Administration (OSHA) guidelines and National Institute for Occupational Safety and Health (NIOSH) and EPA designated levels of chemical protection (see paragraph 1 b). Familiarity with the OSHA/EPA information on these approved levels of personal protection will enable DOD personnel to understand and adapt to the protection and decontamination procedures used at an incident site. DOD personnel tasked to work in contaminated areas should be trained and equipped to the appropriate level of protection needed for the hazard present. The level of personal protection to be used at an incident site will be decided by the incident commander and will be coordinated with all responders and communicated through appropriate command channels.

a. Individual Protective Equipment.

(1) Proper selection and wearing of approved personal protective equipment (PPE) can provide the required respiratory protection. This is achieved by air filtration devices, such as the M40 or MCU2A/P protective mask, or by atmosphere supplying respiratory equipment, such as the SCBA. The air-filtration masks (AFM) should never be worn in the presence of unidentified and known contaminants that the filters are not designed for (e.g., a C2 canister is not a defense against carbon monoxide or ammonia) or in atmospheres containing less than 19.5 percent oxygen. This limits the use of these devices in some emergency-response operations. Atmosphere-supplying respiratory equipment, such as the SCBA and the supplied-air respirators (SAR), provide the responder with a source of air that creates a positive pressure in the facepiece. These respirators permit the responder to operate in low-oxygen and volatile chemical atmospheres where an air-purifying respirator (APR) does not offer enough protection. The SCBA is most commonly used in emergency operations and the SAR is used when extended work times are required. These devices will provide the responder with the greatest protection against exposures to gases and vapors.

(2) Proper personal protective clothing and equipment are needed for responders to complete their mission in a hazardous environment. The hazards present and the type of work to be done in the designated hot zone will dictate the type of PPE required. Furthermore, standardized donning and doffing procedures are required for responders that enter and exit the hot zone to—

- Minimize the spread of contamination.
- Ensure their safety.

- Establish a consistent and effective training program.

b. Levels of Individual Protection. There are four levels of protection established by the EPA (Levels A, B, C, and D). OSHA has also adopted these same four levels. The levels are determined by the skin and respiratory protection provided by the selected chemical protective ensemble. The protective suits are worn according to the guidelines published by OSHA and the National Fire Protection Association (NFPA). The PPE places an increased level of mental and physiological stress on individuals (i.e., heat stress, respiratory resistance, etc.), which must be carefully monitored and evaluated through all phases of an operation.

(1) Level A protection suits provide the greatest level of skin and respiratory protection (see Figure B-1). Level A consists of a totally encapsulating suit with gloves and boots attached. The SCBA is worn inside the suit or a supplied-air system will be used for respiratory protection. Two pairs of gloves, latex then chemical resistant, are worn under the suit gloves. Chemical-resistant boots are worn over the suit boots. A radio is worn, and optional items such as hard hats, cooling vests, and kneepads may be worn under the suit. This ensemble should be worn when the highest level of respiratory, skin, and eye protection are required.

Figure B-1. Level A Protection

(2) Level B protection should be considered when the highest level of respiratory protection is needed but with a lesser level of skin and eye protection. This level consists of nonencapsulating, chemical-resistant suits, often called splash suits or rain suits. Level B comes in several configurations, none of which are vapor tight (see Figure B-2). The SCBA is worn either inside or outside the suit depending on the configuration. Chemical-resistant outer boots are worn and three pairs of gloves may be used. Latex inner gloves are covered with chemical-resistant gloves, and then a pair of chemical-resistant outer gloves may cover both of these for additional protection. A radio is worn, and the optional items listed for Level A may also be worn. Level B is the minimum level recommended for initial site entry until all hazards have been identified and are being monitored.

Figure B-2. Level B Protection

(3) Level C protection can be selected when the airborne substance is known and is being monitored. All criteria must be met and the proper filters for the known hazard must be available when using the APR. The air must be continuously monitored throughout the operation to ensure that the Level C protection remains effective for the environment (see Figure B-3). An escape mask should be worn in case of a change in conditions that make the air-purifying mask ineffective. This escape mask will provide protection to the responder during movement to the decontamination line without risking exposure. The Level C ensemble consists of a full facepiece, the APR, and a chemical-agent-resistant suit. Chemical-agent-resistant hood, apron, boots, and gloves should also be worn. The gloves are layered the same as for Level B. A radio is worn, and the optional items for Level A may be worn under the suit. Level C protection is similar to MOPP4 in a chemical-weapons environment; MOPP suits and protective masks are not effective for many TIC. The levels of protection set by the incident commander must be followed to protect all personnel.

Figure B-3. Level C Protection

(4) Level D protection does not provide any respiratory or skin protection and should not be used at an incident site that presents these hazards (see Figure B-4). The protective ensemble for Level D is a work uniform. The military battle-dress uniform or coveralls meet the requirements for this level of protection.

Figure B-4. Level D Protection

2. Shelter/Protection In Place

Field-expedient protection includes steps taken to provide immediate protection of personnel/materiel and to enhance protection of mission-essential facilities in the event of an incident. These procedures and planning factors are often included in emergency-action discussions of "protection in place" when it is required to sustain critical operations through an event or key infrastructure facilities that may be a target. The following discussion focuses on four basic concepts.

a. Sealing Air-Infiltration Points. Ideally, sealing the inside of a building/room should be done before the attack or incident. Particular care must be taken to ensure that all openings to the outside that can possibly be sealed are ready for immediate sealing at first warning.

(1) Precut and position sealing materials for doors so that final sealing requires minimum response time. Once an attack occurs, sealed doors are no longer usable and the door should be labeled as being sealed. Based on weather, preseal windows and other openings. Seal all air conditioning (AC) and heating vents and ducts leading to the inside/outside. Materials should be precut and positioned, ready for use.

(2) Some openings lend themselves to sealing or packaging material generically referred to as "foam-in-place" packaging systems available through local procurement. Foam-in-place is a generic term for a commercially available packaging/sealing material that expands when sprayed onto a surface or into an enclosed area.

CAUTION: Since air circulation and ventilation are restricted using these techniques, execution relies on early warning and rapid action to complete sealing.

b. Using NBC or Expedient Covers. Keep supplies indoors, if possible. Always keep the supplies covered whether stored indoors or outdoors. Uncover supplies only long enough to retrieve needed items. When practicable, cover all equipment. When not in use, park equipment under overhead cover. If insufficient NBC or expedient covers are available for the amount of equipment/supplies to be covered, prioritize by need and equipment/supply availability to determine which supplies and equipment will be covered.

c. Using NBC or Expedient Shelters. Designate and prepare shelters before an attack/incident and routinely use them during exercises. These shelters may include approved NBC or expedient shelters.

d. Using Multilevel Buildings (Vertical Separation). Chemical agents tend to be heavier than air (selected blood agents are excluded). When preparing alternate C^2 and medical facilities, use floors above ground level to avoid the full impact of chemical agents. Prepare and use the sealing techniques previously discussed.

NOTE: These procedures are offered primarily for hard-to-protect facilities and unprotected HN facilities/residences. DOD agencies should strive to provide approved NBC collective protection at designated critical facilities.

3. Summary

Train all personnel on where, when, and how to protect themselves, equipment, and supplies under NBC conditions. Follow up with exercises and drills to reinforce and sustain training proficiency. Postattack actions should also be addressed during attack/incident exercises. Establish and maintain protective postures for required civilians, as well as military forces. Establish and maintain protective-equipment serviceability programs according to the specific items' technical references. Table B-1 is designed to assist the commander in providing protection-in-place options.

Table B-1. Protection-In-Place Options

For This Function:	Use These Items:	With This Guidance
Sealing Air-infiltration Points	• Plastic Canvas • Plastic Sheeting • NBC-Protective Cover (NBC-PC) • Foam In Place • Gasket forming materials (silicon, rubber gaskets, foam-sealing materials)	• Place plastic around the inside of windows and doors. • Close holes and windows with plywood; seal them using the items shown and duct tape. • Spray foam into doorways, ducts, and windows, overlapping all sills and openings. Foam spray will not work well on overhead horizontal surfaces. • Spray foam into all air intakes and exhausts. • Cut and fit plastic as necessary; use duct tape to hold it in place. • **CAUTION: Turn off heat, ventilation, and AC systems before sealing air intakes/exhausts.**
Using NBC or Expedient Covers Individual Covers	• Plastic Sheet • Plastic Canvas • NBC-PC • Military/Civilian Wet-Weather Gear/Rain Suits (Rubber) • Ponchos • Modular Chemically Hardened Tent (MCHT) • Tent Extendible Modular, Personnel (TEMPER)	• Cut plastic sheet, plastic canvas, and NBC-PC 1.5 times taller and wider than the individual using it. Use it as a cover to provide protection in place for personnel caught in the open. • Make rain suits/ponchos part of the daily work uniform; use them in conjunction with plastic sheet, plastic canvas, and NBC-PC
Material Covers	• Plastic Sheeting • Plastic-Coated Canvas • NBC-PC • Large-Area Shade Systems • Large-Area Maintenance Shelter	• Cut and fit plastic as necessary; use duct tape to hold it in place. • Place covered material under shade systems or shelter for additional protection.

Table B-1. Protection-In-Place Options (Continued)

For This Function:	Use These Items:	With This Guidance
Using NBC or Expedient Shelters	• Container Express (CONEX) • Military-Owned Demountable Container (MILVAN) • Modular Command-Post System (MCPS) • Modular General-Purpose Tent System (MGPTS)	• Place the CONEX/MILVAN at regular intervals around fixed sites. Attach plastic sheet/NBC-PC of sufficient size to the front of the CONEX/MILVAN to cover the opening and to act as a liquid barrier. Attach weight (piece of wood/iron bar, etc) to the bottom edge of the plastic to hold it in place when it is being used. • Erect an MCPS/MGPTS at specified intervals (based on personnel concentrations). • Use these measures in conjunction with individual and material covers.
Using Multilevel Building (Vertical Separation)	• Plastic Sheeting • Plastic-Coated Canvas • NBC-PC	• Move operations to upper floors/levels. • Block entryways and openings with multiple sheets of plastic. Place a plastic sheet at the foot of the stairs, another part way up the stairs, a third at the top of the stairs, etc.
CAUTION: The duration of protection when using these measures is not quantified and is provided for emergency situations only. This table does not preclude using other expedient measures afforded by available materials and common sense.		

4. Expedient Actions

The following expedient actions can greatly enhance the protective capabilities of a medical-treatment facility:

a. Seal all windows, doors, and other outside openings with tape and plastic sheeting.

b. Turn off the AC/heaters and set up an air lock-type entry/exit way.

c. Activate air handlers if they are available to provide a positive facility overpressure. This will further reduce the incidence of contamination entering the facility.

d. Use these procedures to allow additional time for hospital personnel to provide patients with some degree of individual protection for staying in place or for transport away from the contaminated area.

Appendix C

DECONTAMINATION TACTICS, TECHNIQUES, AND PROCEDURES

1. Background

The purpose of this appendix is to familiarize DOD personnel with the decontamination procedures that may be encountered when responding to incidents that are associated with NBC-related situations. It addresses guidance on the use of TTP to support the decontamination process for both military and civilian response organizations. DOD personnel must be aware of decontamination planning and operational considerations in order to operate effectively with civilian counterparts.

2. General

The aim of decontamination is to rapidly and effectively render contamination harmless or remove it. The ability to function in a contaminated environment and perform decontamination actions is one of the factors that can reduce the effect of an attack. The goal of decontamination remains the same whether it is performed in wartime or in a peacetime response operation—to limit the spread of the contamination and reduce levels to the greatest extent possible. The tasks performed do not change, but the procedures may vary depending on the nature of the accident/incident and available equipment. Standard DOD decontamination procedures, used in an NBC environment, can be modified to work effectively in specific incident-related situations. When tasked to support a decontamination mission, reduction and containment should always be the primary focus of the operation.

3. Decontamination Basic Concepts

a. Priorities. The incident commander establishes decontamination priorities. Decontamination of exposed personnel and casualties are usually the top priority followed by equipment, facilities, and areas. NBC contamination threatening to create a downwind hazard will also have a high priority, and contamination-reduction and containment actions must begin as soon as possible.

b. Methods. All decontamination is based on one or more of the following principles: destroy toxic agents by chemically modifying them (destruction); physically remove agents by absorption, washing, or evaporation; and/or physically isolate the agent so that it causes no damage (shielding/containment). Initial efforts should focus on terminating the contamination release if responders are able to identify the source of the contamination.

c. Decontaminants. The decontaminant of choice will depend on factors like the type of contamination and the operational environment. The decontamination plan (as prepared by the incident commander's staff) will outline details such as the type and amount of decontaminant that will be used. For example, weathering is one method of

decontamination; however, it may not be an acceptable alternative at an incident site due to time constraints.

4. Decontamination Planning

a. The decontamination process (as directed and coordinated through the IMS process) should be directed toward confinement of the contaminant within the hot zone and the decontamination corridor. The potential effects of the decontamination process on responder personnel are considered when developing the decontamination plan, and countermeasures such as adequate work/rest cycles are addressed.

b. The determination of proper decontamination methods and procedures are considered before the incident as part of the overall preincident planning, hazard, and risk evaluation process. No entry into the hot zone should be permitted until appropriate decontamination methods are determined and established.

c. During the course of decontamination planning, the basic steps of mass personnel decon (emergency procedures) and estimating the total number of personnel to be decontaminated will influence the amount of resources used to support the operation. These basic steps include:

- Clothing decontamination and removal.
- Showering (may be as simple as spraying down with fire hoses/using soap and water).
- Monitoring (and medical treatment) for contamination.
- Performing triage and treatment as required.

5. Personnel and Casualty Decontamination-Station Overview

a. Personnel decontamination requires a step-by-step process to reduce the contamination on casualties and personnel to a safe level and to prevent the transfer of contamination outside the containment area. The procedures used are based on a field analysis of the hazard and risks involved. This consists of checking technical reference sources to determine the general hazards such as flammability and toxicity, and then evaluating the relative risks (i.e., vapor versus liquid; blister versus nerve; radiological versus chemical and/or biological) associated with the contaminants.

b. The formal decontamination process begins in the warm zone (see Figure C-1) (contamination-reduction corridor). A controlled entry point marks the entrance to the decontamination corridor and a controlled exit point marks the exit to the cold line (a transition point between the warm and cold zones).

c. Once personnel cross the cold line, medical teams will perform triage and conduct monitoring and treatment for any injuries. Next, personnel will then be redressed/covered, moved to a holding area, and monitored for ongoing signs and symptoms

of exposure. When medical triage dictates, the casualty will be treated for injuries and evacuated to a medical facility.

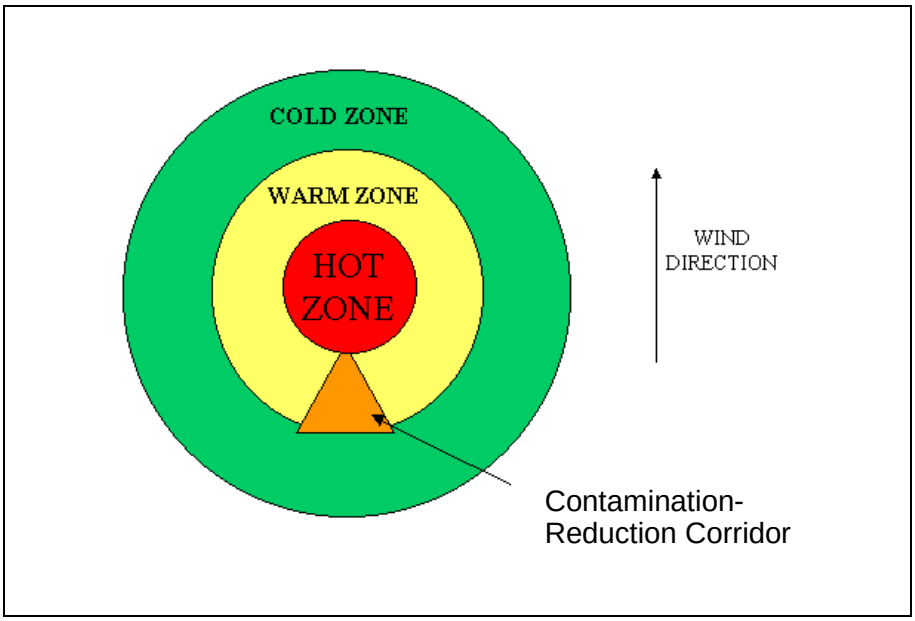

Figure C-1. Establishment of Safety Zones at a Hazardous-Materials Incident Scene

d. Figure C-2 depicts a sample of a personnel decontamination station that could be used to decontaminate personnel. The decontamination line may be two stations or eight stations. The basic goal is to eliminate the contaminant in a safe and appropriate manner. Each position should be manned by trained and properly equipped individuals to direct personnel and assist them, as necessary, in the decontamination process.

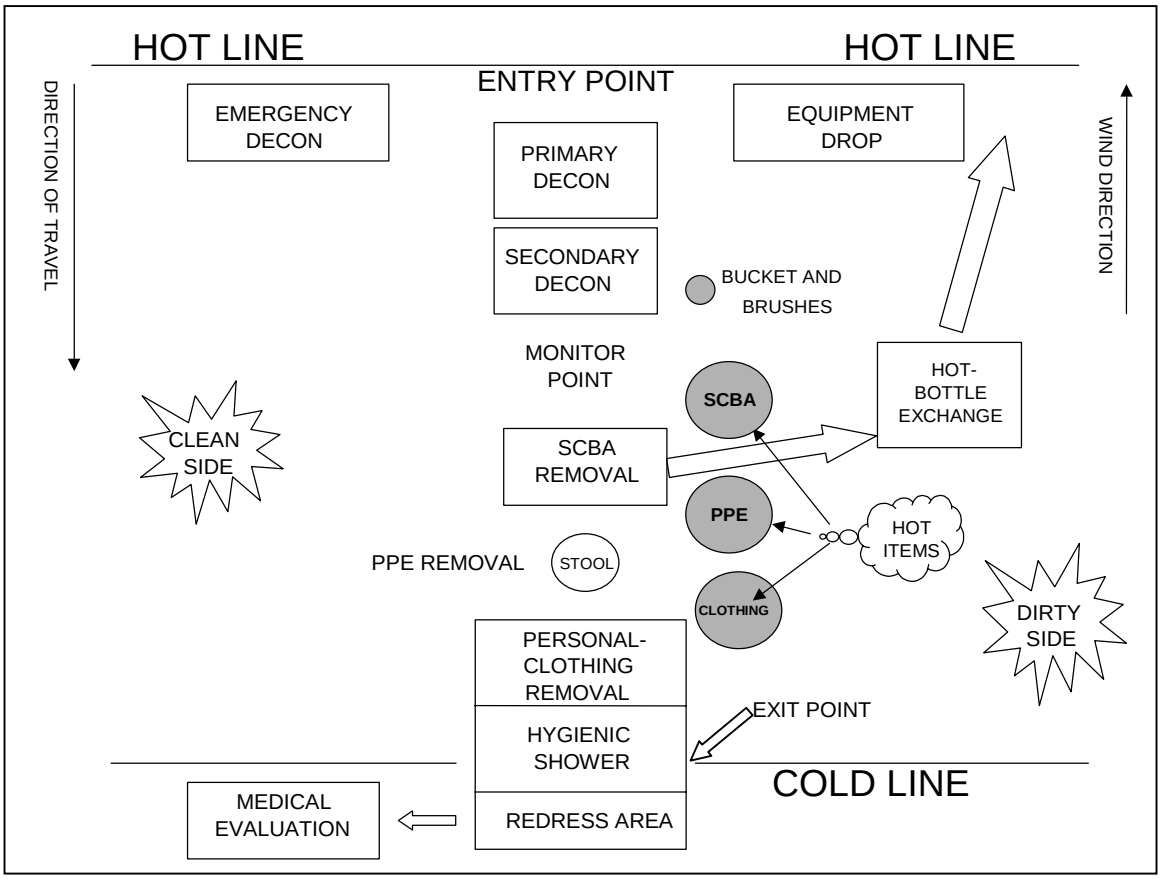

Figure C-2. Sample of a Personnel Decontamination-Station Layout

6. Contamination-Reduction Considerations (Personnel Decontamination-Station Operations)

a. Contamination reduction removes, rinses off, or dilutes the contaminants. This consists of three main steps, although several intermediate steps may be necessary (which will add additional wash and rinse stations to the decontamination line). The type of hazard will dictate what decontaminants are used and the best method of decontamination. The decontamination line generally consists of a primary decontamination to remove the majority of the hazard, a secondary decontamination tailored to the specific hazard, a monitor point to ensure that all contamination has been removed from the outer garment, a PPE and personal-clothing removal, and a medical evaluation.

b. Consideration must also be given to the staffing and safety of the decontamination team. The decontamination team should be fully trained on all PPE worn, as well as trained and certified on all equipment that is being operated. Decontamination team members will be dressed in Level A through Level D individual protection based on their proximity to the hot zone and the level of contamination they are expected to encounter throughout the decontamination site. All decontamination

personnel, to include the equipment they used, must be decontaminated before leaving the contamination-reduction zone (CRZ). There are many approaches to decontamination, but all are built around the basic principle of contamination reduction. The hazard encountered in the mission will dictate the necessary details, but the overall process remains the same.

7. Decontamination Procedures (Entry Point) (See Figure C-2)

a. The controlled entry point is a clearly designated place at the hot line that identifies the beginning of the decontamination corridor (CRZ). The purpose of the controlled entry point is to ensure that all personnel leaving the hot zone process through the decontamination line, thereby controlling the spread of contamination. At the controlled entry point, two separate stations are set up—the equipment drop point and an emergency-decontamination area.

b. Primary decontamination can be accomplished in several ways depending on the hazard. Typically, it consists of a "wet decontamination" (i.e., emergency decon) where the individual is flushed with water to remove or dilute the contaminants. A "dry decontamination," such as brushing and scraping, can be another alternative for other contamination removal (i.e., radioactive-contaminated physical particles). Other considerations such as the hazard's reactivity with water and its solubility will be factors in determining the decontamination method. Once the primary decontamination has been accomplished, the individual moves to the secondary decontamination.

c. Primary decontamination activity at the equipment drop may consist of a tarp or table where all equipment used in the hot zone is placed. The equipment drop serves a dual purpose. First, it ensures that all potentially contaminated equipment stays within the contaminated area, and secondly, it allows the equipment to be reused by anyone reentering the hot zone. This will minimize the amount of equipment brought into the hot zone that will later require decontamination or disposal.

d. Secondary decontamination can consist of one to several stations depending on the hazard. The decontamination team must be available to supervise the operation and assist in the processing of personnel. The team is trained to help the personnel decontaminate their outer clothing from top to bottom (always moving the contaminates toward the ground). To control the spread of contaminants, low-pressure water should be used and overspraying and splashing should be kept to a minimum. The decontamination site should be established in an area where contaminated runoff can be controlled.

e. Once the primary and secondary decontaminations are complete, the personnel should be monitored for any residual contamination. If the hazard is known, monitors such as the chemical-agent monitor (CAM), radiacmeters, and commercial instruments can be used to perform this function. When working with an unknown substance or without monitoring devices, use visual observation. Stains or discoloration of the PPE should be noted as well as any obvious signs and symptoms that the personnel exhibit indicating exposure to the hazard. If the contamination is still present (visually observed or detected by monitoring devices), the personnel return to the primary and secondary decontamination areas to repeat the procedure, paying specific attention to the areas noted

by detection devices. After the contamination check, the outside of the PPE (i.e., Level A suit) should be decontaminated (however, personnel should not touch the PPE with their bare hands).

f. The decontamination and monitoring process is unique to each accident/incident. Decontamination techniques may be both physical and chemical. The decontamination methods selected should be tailored to the hazard, responders on scene, location, and equipment available. The equipment and the response units' knowledge, as well as the IC's operations section technical knowledge and research will be of assistance when dealing with hazards. Whichever method(s) is used, the outcome should be the elimination or reduction of contamination to a safe level while confining the hazard to the hot zone and decontamination corridor.

8. Decontamination Procedures (SCBA Removal) (See Figure C-2)

a. As the personnel enter this station, the decontamination team unzips and peels back the personal protective suit, exposing the SCBA. The decontamination team should not touch any part of the inside of the suit and the individual should not be touched by any part of the contaminated side of the suit. At this point, the individual can begin removing his PPE or conduct an air-bottle exchange and return to the hot zone. If monitoring devices are not being used or the hazard is unknown, the order of the next two stations may be reversed to protect the respiratory system of the individual until all outer garments have been removed.

b. If the individual is returning to the hot zone, the air bottle or the SCBA will be changed with the assistance of the decontamination team members. At this station, depending on the risk of exposure, the air bottle and SCBA can be removed and exchanged for clean, serviceable ones. Off to the side of this station, another team would replace the air bottle or SCBA and then reseal the individual's suit. The individual can then reenter the hot zone to continue operations.

c. Individuals continuing through the decontamination process will remove their own facepiece and loosen the straps on the SCBA. The decontamination team assists in removing the SCBA and places it in a collection container off to the side. The individual then continues on to the next station to the conduct PPE removal.

9. Decontamination Procedures (Showers) (See Figure C-2)

Procedures conducted at this station can occur on site using portable enclosures if contamination of personal clothes is suspected. Portable enclosures usually have three areas—one for the removal of clothing, another for showering, and a third for donning clean clothes. Clothing that is removed should be bagged and labeled for each individual, in case uncontaminated clothing can be salvaged. The individual should shower, using generous amounts of soap and water and scrubbing downward from head to toe. After the shower, the individual moves on to the next area to dress in clean clothing. Clothing such as cotton coveralls or hospital scrubs may be used for individuals when other clean clothes are not available. The individual exits the showering facility into the cold zone (contamination-free zone). All cleaning items used during the decontamination process

should be bagged for disposal, and decontamination runoff is controlled to limit the spread of contamination. Another factor to be considered at this station should be the environmental effects on personnel. During cold weather, appropriate measures are taken to eliminate the possibility of individuals receiving cold-weather injuries.

10. Decontamination Procedures (Medical Evaluation) (See Figure C-2)

After completing a thorough decontamination, individuals should proceed to a medical evaluation station. The individuals' vital signs are taken, documented, and compared with the baseline information taken before entering the hot zone. Any individual showing any signs or symptoms from exposure or injury should be transported to a hospital for appropriate treatment and monitored after ensuring that they have been decontaminated as completely as possible. Proper documentation on all individuals processed through the decontamination corridor must be maintained. The names of individuals, methods of decontamination, and any exposures or injuries should be included. Once the individuals leave the medical-evaluation area, the decontamination process is finished.

11. Casualty Decontamination

For more detailed information on casualty decontamination procedures, see applicable service documents such as FM 8-10-7.

a. The casualty decontamination process discussed in this manual (see paragraphs 12-18) is similar to those discussed in applicable service manuals. The procedures described in this appendix were modified, where necessary, to account for large numbers of casualties, casualties without protective equipment, and responders wearing the PPE that conforms to OSHA standards.

b. Casualty Decontamination Stations (see Figure C-3). Casualty decontamination is time constrained. The layout of the decontamination corridor is depicted in Figure C-3. The layout of the stations within the decontamination corridor should be set up to process unprotected causalities as quickly as possible. The decontamination corridor begins at the hot line and extends through the warm zone with the clean treatment and patient disposition area 30 to 50 meters into the cold zone. Casualty decontamination should be established in an area where the runoff could be controlled. The personnel (responder) decontamination corridor should not be visible from the casualty decontamination corridor. This should prevent the perception that individuals in protective gear are being processed through the decontamination corridor and receiving treatment before casualties. Overall, the emphasis of casualty decontamination is the quick removal of contamination to reduce or prevent further personal injury and prevent the spread of contamination.

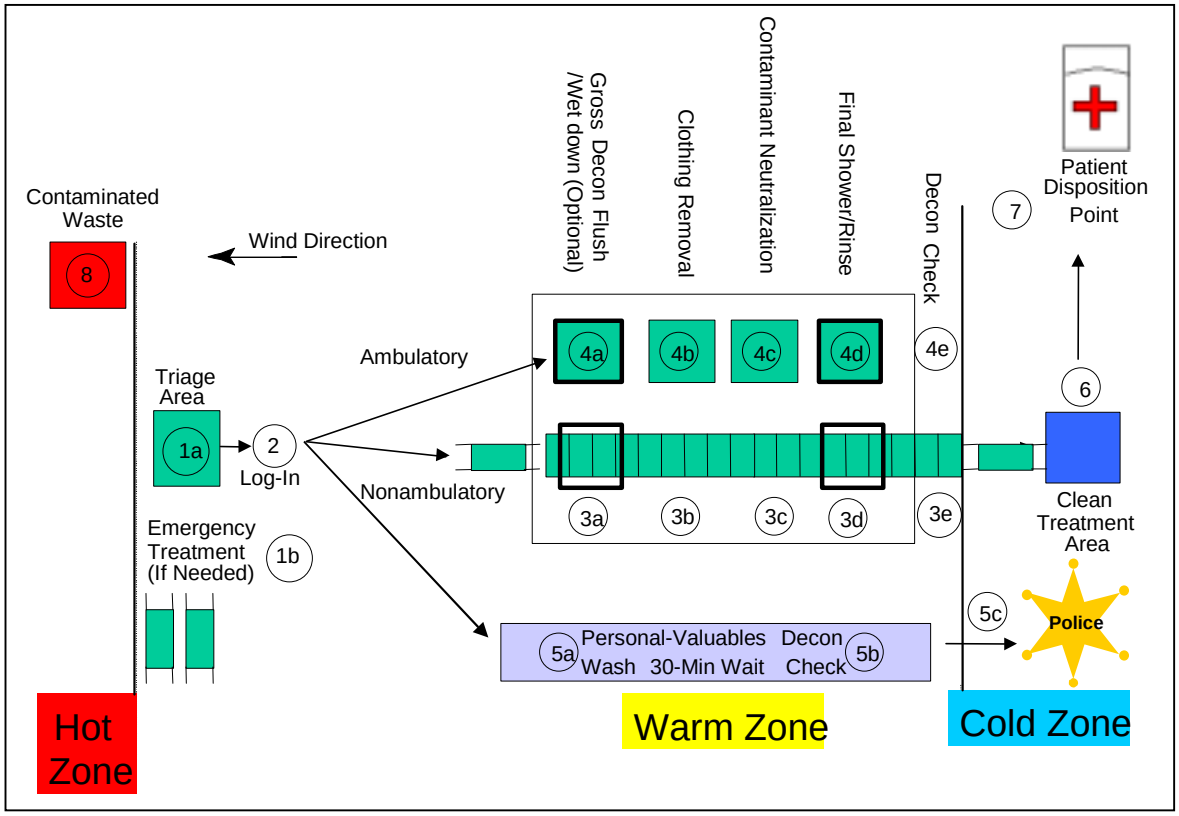

Figure C-3. Sample of a Casualty Decontamination-Corridor Layout

c. In the decontamination process, equipment decontamination solutions are not used on the skin. These solutions may cause burns and further injury. Mild, nonabrasive soaps or a chlorine solution should be used. When using chlorine solutions, prepare two separate concentrations. A 0.5 percent chlorine solution should be used to decontaminate the patient's skin and splints and irrigate wounds. A 5 percent solution should be used to decontaminate gloves, aprons, litters, and cutting devices. (A 0.5 percent solution can be created by adding 2 quarts of household bleach to 5 gallons of water. A 5 percent solution is approximately the same as household bleach; there is no need to dilute.) When removing gross contamination from the patient's skin before the first rinse, the M291 kit can be used.

12. Casualty Decontamination (Triage Point) (See Figure C-3)

a. As personnel arrive at the triage station, symptomatic personnel should be separated from personnel not displaying symptoms. A quick medical assessment is performed to determine the medical status of each individual and the decontamination station the individual will proceed to. The order in which personnel are processed through decontamination is based upon their triage status and the instructions of the medical official in charge. If a respiratory hazard is present, individuals awaiting triage and

decontamination should be provided with respiratory protection. Ambulatory casualties will be processed separately from the nonambulatory (litter) casualties.

b. Communicating as much information to the casualties as possible will foster cooperation from those waiting to be decontaminated. Before being processed through the decontamination stations, casualties requiring emergency life-saving medical treatment are routed to a medical-treatment station collocated with the triage point. When dealing with large numbers of casualties, many of the less severely injured walking wounded may be required to wait. Casualties being monitored following decontamination should be placed in designated rest areas located in the cold zone.

13. Casualty Decontamination (Emergency-Treatment Area) (See Figure C-3)

Medical personnel at this station provide life-saving emergency medical care only. The amount of medical treatment given should be minimal in the contaminated treatment area. Airway management, cervical immobilization, bleeding control, and treatment with nerve-agent antidote kits are all measures that could be performed to stabilize the casualty and increase his survivability throughout the decontamination process. Once the casualty is stabilized, he should be processed through decontamination as a nonambulatory patient and receive further medical care in the clean area. Bandaging of nonbleeding wounds may be postponed, based upon the overall casualty load and the severity of wounds, until the casualty reaches the clean treatment area. This permits wounds to be fully decontaminated before being passed through to the clean treatment area.

14. Casualty Decontamination (Nonambulatory Decontamination) (See Figure C-3)

a. Litter casualties will require timely decontamination. At the triage station, all nonambulatory casualties are placed on a litter and brought to the nonambulatory decontamination area. The litter is placed on supports in order to keep the casualty raised above the ground. Process the casualty through headfirst to ensure that the airway (i.e., the head) is upwind if possible.

b. If biological or radiological contamination is suspected, the casualty's clothes should be wetted before attempting removal to prevent the reaerosolizing of the hazard. Casualties wearing respiratory protection should keep the facepiece on until after being monitored and confirmed clean, unless it interferes with the establishment of an adequate airway.

c. If it is necessary to decontaminate the casualty's face, perform the procedure without exposing him to vapor hazards. To accomplish this, the casualty should hold his breath and close his eyes while the protective mask is removed and the face and facepiece are decontaminated. When decontaminating a casualty without respiratory protection, decontaminate him headfirst, wet him down if required, cut away and remove all his clothing, decontaminate the front and back sides of his body with a 0.5 percent chlorine solution, conduct a final wash or rinse, and then check him. If a litter is used, always decontaminate it as one would decontaminate the casualty and change the litter after removing the casualty's clothing and when transferring him to the cold zone.

d. If the casualty is unable to accomplish this procedure, the decontamination team should postpone decontamination of his face until removal of the facepiece is accomplished at the shuffle pit located on the cold line. Instead, the decontamination team should decontaminate the outside of the facepiece with a 0.5 percent chlorine solution and cut away his outer clothes, being careful not to disturb holes or stained areas that might provide evidence in a criminal prosecution.

e. The decontamination team should ensure that the cutting device and their gloves and aprons are rinsed with a 5 percent chlorine solution before coming in contact with the casualty. The casualty's clothes should be bagged and sealed separate from his valuables. Both bags should be labeled with the casualty's name and placed into a closed container off to the side for evaluation and decontamination at a later time. After all clothing is cut away, the casualty is transferred to a clean litter.

f. Before washing the casualty, gently brush or blot all visible contamination to reduce the chance of the hazard reacting with water. When all visible contamination is removed, the casualty should be washed with soap or a 0.5 percent chlorine solution and copious amounts of water. The extent of washing and the time spent decontaminating will depend on the hazard and the casualty's exposure.

g. Casualties whose skin have come in contact with a hazard will require more extensive decontamination than those exposed to vapors only. When the extent of contamination is uncertain, the decontamination team should always assume a worse-case scenario. The decontamination team should begin the decontamination process at the patient's head and face, allow no blockage of the airway, and be careful not to flush contaminants into the casualty's eyes or wounds. Medical personnel should remove all contaminated bandages and wash and rinse wounds from the center outward. Following the washing and rinsing of wounds, cover them with water occlusive dressings or plastic wrap to prevent secondary contamination. Splints should be decontaminated in place by applying a 0.5 percent chlorine solution to the splint, padding, and cravats. If the casualty's eyes are contaminated, flush them with a normal saline solution. When all wounds are cleaned and dressed, the remainder of the casualty's body will be decontaminated. During the decontamination process, pay special attention to the hair, nails, skin folds, joints, and ear and nose cavities. Rinse the casualty with large quantities of low-pressure water. If the casualty has a triage tag, drop it into a plastic bag, seal the bag, and rinse the outside of the bag with a 5 percent chlorine solution. The triage tag can now accompany the casualty. Medical personnel will write a new triage tag when the casualty reaches the clean treatment area. Once the triage tag is copied, the original tag (still sealed) is considered contaminated and should be set aside to be disposed of with other HAZMATs during the recovery phase.

h. When the casualty is fully decontaminated, he is moved to the next area to be monitored for completeness of decontamination. Monitoring can be done by a variety of methods. M8 paper, CAM, low-level radiacmeters, and commercial devices can all be used for the appropriate hazard. For unknown hazards, visual inspection may be the only method available for checking the thoroughness of the decontamination process. When monitoring instruments are used, ensure that the area in which the casualty will be

monitored is free from contamination. If the casualty is still contaminated, he will be moved back to the wash area and the decontamination process will be repeated. Casualties that are monitored and determined to be free of contamination will be moved to the clean side via the shuffle pit.

i. The decontamination team carries the casualty by litter into the shuffle pit and places the litter on supports. After rinsing their gloves and aprons with a 5 percent chlorine solution, the decontamination team lifts the casualty from the litter and removes it. The decontamination team on the clean side of the cold line will provide a clean litter for the casualty. The decontamination team from the warm zone will remove any respiratory protection still on the casualty and decontaminate his face with a 0.5 percent chlorine solution. The facepiece returns to the warm zone to be decontaminated at a later time. All equipment and personnel involved in operations in the warm zone must remain there until they are fully decontaminated. The decontamination team from the clean side of the cold zone carries the casualty by litter out of the shuffle pit to the clean treatment area. Upon reaching the cold zone, the casualty (still on the litter) should be covered to prevent hypothermia.

15. Casualty Decontamination (Ambulatory Decontamination) (See Figure C-3)

a. Casualties who are able to walk and assist in the decontamination process are sent to the ambulatory decontamination area. This includes casualties who have minor injuries and minimum exposures that have received the proper treatment. Casualties are processed in order by triage status; some casualties may be routed to a holding area to await decontamination. This is especially true in accidents/incidents with large numbers of-walking-wounded casualties. Symptomatic casualties are processed before casualties that are asymptomatic (personnel not showing symptoms).

b. Gross decontamination is performed first. This consists of removing any visible contamination from the casualty. If radiological or biological contamination is suspected, the casualty's clothes should be wet down before and during the removal process. The casualty's valuables should be bagged, sealed, and labeled with his name. Casualties wearing respiratory protection should be assisted by the decontamination team in decontaminating their faces and replacing their facepieces without further exposing them to vapor hazards. If this is not possible, postpone decontamination of the face until the facepiece is removed at the end of decontamination. Triage tags should be placed in a plastic bag, sealed, and rinsed with a 5 percent chlorine solution. The triage tag accompanies the casualty until it is rewritten in the clean treatment area. The triage tags (still sealed) should be collected in a plastic bag then returned to the warm zone to be disposed of with other hazardous waste. Casualties are then separated, sending male patients to one corridor and female patients to another. The disposition of families and small children should be considered when establishing the decontamination corridors. Throughout the decontamination process, casualties should be shielded from bystander and media viewing.

c. In the appropriate decontamination corridor, the casualty should be assisted in removing all outer clothing down to his undergarments. Clothing should be bagged, sealed, and labeled with the casualty's name, then placed into sealed containers for inspection at a

later time. If biological or radiological contamination is suspected, continue wetting the casualty's clothing during removal to prevent the reaerosolizing of the agent. Cut away the casualty's clothing. Keep the clothes from contacting the casualty's face during removal. After clothing removal, apply a decontaminant to the casualty or have him shower with soapy water, as appropriate. After the decontaminant application, the casualty washes and rinses thoroughly, starting at the head and working down to the feet. He should pay special attention to his hair, nails, skin folds, and ear and nose cavities. Soap or a 0.5 percent chlorine solution should be used, if available. The decontamination process should not be delayed due to a lack of soap. Use large amounts of water.

d. After washing and rinsing thoroughly, the casualty moves on to the monitoring area. The casualty is monitored from head to toe for completeness of decontamination. If any residual contamination is found, return the casualty to the shower to repeat the decontamination process. Casualties who are monitored and contamination is not found should have their respiratory protection removed, if it is still present. If decontamination of the face was postponed, it should be done with a sponge soaked in a 0.5 percent chlorine solution upon removal of the facepiece. Provide the casualty with a cover (sheets, coveralls, hospital gowns) and direct him to the clean treatment area in the cold zone for further medical assessment.

16. Casualty Decontamination (Clean Treatment Area) (See Figure C-3)

a. Upon completion of decontamination, both ambulatory and nonambulatory casualties are brought to the clean treatment area in the cold zone for triage and medical evaluation. The clean treatment area should be located at least 30 to 50 yards from the cold line. Monitoring devices should be placed between the cold line and the clean treatment area to detect any drift of hazardous vapors from the warm zone. If the casualties have been previously triaged, the decontamination team will fill out a new triage tag updating it as necessary. The triage tags brought through the decontamination process in sealed bags are considered to be hazardous waste and must be disposed of properly. If triage has not been done, a triage tag is filled out as medical personnel perform secondary assessments on each casualty. All life-threatening injuries should have been identified, decontaminated, and stabilized, and casualties should have received priority on transport upon reaching the cold zone.

b. Based on their triage status, casualties are moved into selected treatment areas. Casualties in the treatment areas will need protection from observation by the media and may need protection from the weather. Blankets, hospital gowns, or some type of cover should be provided during the casualties' wait for transportation. The most critical casualties will receive advanced care and be prepared for transportation first. Casualties who have been identified as requiring a lesser degree of medical care will receive first aid while awaiting transport to a medical facility. All casualties should be transported for medical evaluation regardless of injuries or symptoms.

17. Casualty Decontamination (Casualty Disposition Point) (See Figure C-3)

a. As transportation to a medical facility becomes available, the casualty is moved to the transportation disposition point. One dispatcher in this area should handle all

coordination with medical facilities to prevent the overloading of one hospital. Casualties with the most critical injuries are transported first. The walking-wounded casualties and casualties without injuries or symptoms can be transported by means of buses or vans. Vehicles used to transport patients should have all surfaces, benches, and exposed areas covered by plastic sheeting. Under ideal circumstances, patients should be fully decontaminated on scene. Planning and coordination must include the preparation for casualties who leave the scene and refer themselves to a medical-treatment facility.

b. All personnel handling patients in the cold zone or transporting them should wear appropriate levels of PPE. Any patients being transported by air should receive extra attention to ensure that they are fully decontaminated before being placed aboard the aircraft. Hazardous vapors released into a confined space could have detrimental effects on the unprotected pilots and crew. Information on all patients should be recorded for accountability. Any information that will help track patients should be included in the accountability record, such as the patient's identification; the type of contamination; the extent of injuries; and where, when, and how the patient was transported. The decontamination process will continue until all persons exposed to the agent are received at the medical facilities.

18. Casualty Decontamination (General Patient Decontamination Considerations)

a. The decontamination team must wear the PPE and the respiratory protection that are required for the hazard. The decontamination team at the triage point should have the highest amount of protection needed for the hazard. As patients move through the decontamination line, liquid and vapor hazards are reduced. This allows personnel closer to the cold line to wear a lower level of protection than the decontamination team at the triage station near the hot line. Contact with the patients should be minimized to limit contamination transfer. Medical and decontamination teams should monitor each other for signs and symptoms of agent exposure.

b. Use warm water in cold weather to provide patient comfort and reduce the chance of patient hypothermia. If warm water is unavailable, cold water may be used but weather conditions must be considered. Decontamination may have to be accomplished indoors to prevent patient exposure and cold-weather injuries. School gyms and other facilities containing showers are possible locations for decontamination stations. Minimize the spread of contamination by covering the interior of patient transportation modes with plastic sheeting and promptly bagging all contaminated items as they are removed from the patients.

Appendix D

DEPARTMENT-OF-DEFENSE RESPONSE AGENCIES

1. General

In response to a validated RFA that could originate from a LFA (i.e., FEMA), the established military chain-of-command can authorize subordinate DOD commanders to respond to requests from civil authorities.

2. Response Agencies

This appendix lists example military and other government agencies that could be tasked to respond to a request for CM support.

NOTE: This list is not all-inclusive.

a. Operations Center (OC), DTRA.

(1) Mission. The DTRA OC enables first responders and warfighters to deal with CBRNE threats through on-line assistance and provides a wide-band infrastructure for user support.

(2) Capabilities. As part of the Combat Support Directorate in DTRA, the OC is manned 24/7 and has the requisite communication links to act as the single point of contact for on-line assistance and dispatching of other Agency resources, as required.

b. CM Advisory Team (CMAT), DTRA.

(1) Mission. The CMAT deploys to provide joint technical support to the supported CINC with expertise in chemical, biological, radiological, nuclear, and explosive (CBRNE) response procedures, requirements, resources, C^2, health physics, PA, legal affairs, and specialized technical information. The CMAT coordinates technical information flow by controlling and resourcing requirements passed to the CINC's TAC.

(2) Capabilities. The CMAT is able to task-organize and deploy to support CINC/JTF commanders in the technical aspects of NBC accidents or incidents. The CMAT's incident-tailored force brings with it secure communications, trained technical experts, hazard-prediction modeling, and rapid reach-back capability.

c. WMD Assessment and Analysis Center (WMDAAC), DTRA.

(1) Mission. The WMDAAC provides on-line support and crisis action planning through scenario development and wargame and exercise participation.

(2) Capabilities. The DTRA WMDAAC enables warfighters and domestic first responders through network-centric support to—

- Access computer modules for CBRNE analysis and consequence prediction.
- Access high-resolution weather data.
- Access data files on CBRNE materials.
- Access teleconferencing capabilities and access national experts.
- Perform on-line collaborative computing.

d. Joint Nuclear-Accident Coordination Center (JNACC), DTRA.

(1) Mission. The JNACC is operated in coordination with the DOE. The JNACC provides a centralized center for maintaining and exchanging information with those agencies that possess radiological-assistance capabilities and for coordinating that assistance in response to an accident or incident involving radioactive materials.

(2) Capabilities. The JNACC maintains current information on the location and capabilities of specialized DOD and DOE teams, organizations, and individuals capable of responding to accidents or incidents involving radioactive materials.

e. US Army SBCCOM Edgewood Chemical Biological Center (ECBC).

(1) Mission. The Chemical Support Division (CSD) serves as the ECBC point of contact for operations associated with chemical surety materiel (CSM)-related remediation and restoration at the Edgewood Area of Aberdeen Proving Ground, Maryland, and formerly used defense sites. The CSD also manages and maintains support services and capabilities associated with materiel, facilities, and equipment vital to the ECBC's mission. The CSD provides technical and program management support to the DOD and other governmental agencies associated with processing chemical facilities, equipment, and ammunition.

(2) Capabilities. The CSD has the capability to provide a full range of CSM-related air, water, and soil analysis in support of the ECBC, DOD, and other governmental agency operations and remediation efforts. The CSD also provides and maintains a repository of chemical-agent standard analytical reference materials in support of the DOD chemical-defense mission. The CSD maintains specialized equipment to accomplish its assigned mission and a detailed unit equipment listing.

(3) Components. The CSD possesses the capability to provide low-level monitoring using the real-time analytical platform (RTAP), a vehicle containing a fully functional chemical analysis system. In its current configuration, the RTAP can automatically sample ambient air to detect the presence of specific CW agents (nerve and mustard agents). The RTAP uses a gas chromatograph (GC) miniature chemical-agent monitor system (MINICAMS) equipped with an automatic, continuous air-sampling system. The GC is equipped with a flame photometric detector (FPD) and uses ultrapure laboratory air, hydrogen, and nitrogen supplied via a built in generator. The analysis process allows for the detection of the toxic-chemical agents GB, soman (GD), mustard gas (HD), and o-ethyl s-diisopropylaminomethyl methylphosphonothiolate (VX), in the same sample. The CSD also has available the mobile environmental analytical platform (MEAP) that provides

accurate and legally defendable determinations of CW material (especially CSM), agent degradation products, World War I CW agents, and other compounds of military significance in environmental samples. The MEAP is designed as a fully functional trailer-mounted laboratory able to perform critical on-site chemical analysis and monitoring.

f. US Army SBCCOM CB-RRT.

(1) Mission. The mission of the CB-RRT is to, on order, deploy and establish a robust and integrated capability to coordinate and synchronize DOD's technical assistance (medical and nonmedical) to support the Lead Federal Agency in both crisis management and CM of a CBRNE incident or a designated National Security Special Event. The CB-RRT's focus is on domestic events, but it can also respond worldwide.

(2) Capabilities. The CB-RRT's role is to provide a technical support package specifically tailored for a CBRNE incident response (see Figure D-1). The CB-RRT offers a highly deployable, independent operations center that synchronizes DOD's CBRNE technical expertise. The CB-RRT is composed of members of the Armed Forces and employees of DOD with specialized chemical, biological, medical, and explosive ordnance disposal expertise who are capable of providing technical assistance to aid federal, state, and local officials in the response to and mitigation of incidents involving CBRNEs containing chemical or biological materials (or related hazardous materials). The CB-RRT can be under the operational control of a geographic CINC, JSOTF, or another designated JTF or in direct support of a Lead Federal Agency. The unit is collocated with the SBCCOM's 24-hour Operations Center.

(3) Support. The CB-RRT is designed to provide forward elements to assist the Lead Federal Agencies (FBI, FEMA, EPA, US Secret Service, US Public Health Service, and others) with technical expertise and contingency development options during times of crisis. In addition, through the state-of-the-art SBCCOM Operations Center, the CB-RRT brings together some of the nation's leading chemical and biological technical experts without the need for the experts to be deployed to an incident site.

(4) Coordination. Technical elements that are managed and coordinated by the CB-RRT include, but are not limited to, the US Army TEU, US Army Edgewood Chemical and Biological Center (ECBC), US Army ECBC Forensic Analytical Center (FAC), US Army MEDCOM Special Medical Augmentation Response Teams (SMARTs) and regional medical commands (RMC), USAMRICD, USAMRIID, US Army Center for Health Promotion and Preventative Medicine (CHPPM), US Navy Medical Research Center (NMRC), US Navy Environmental Health Center (NEHC), US Navy Environmental and Preventive Medicine Units (NEPMU), and US Naval Research Laboratory (NRL).

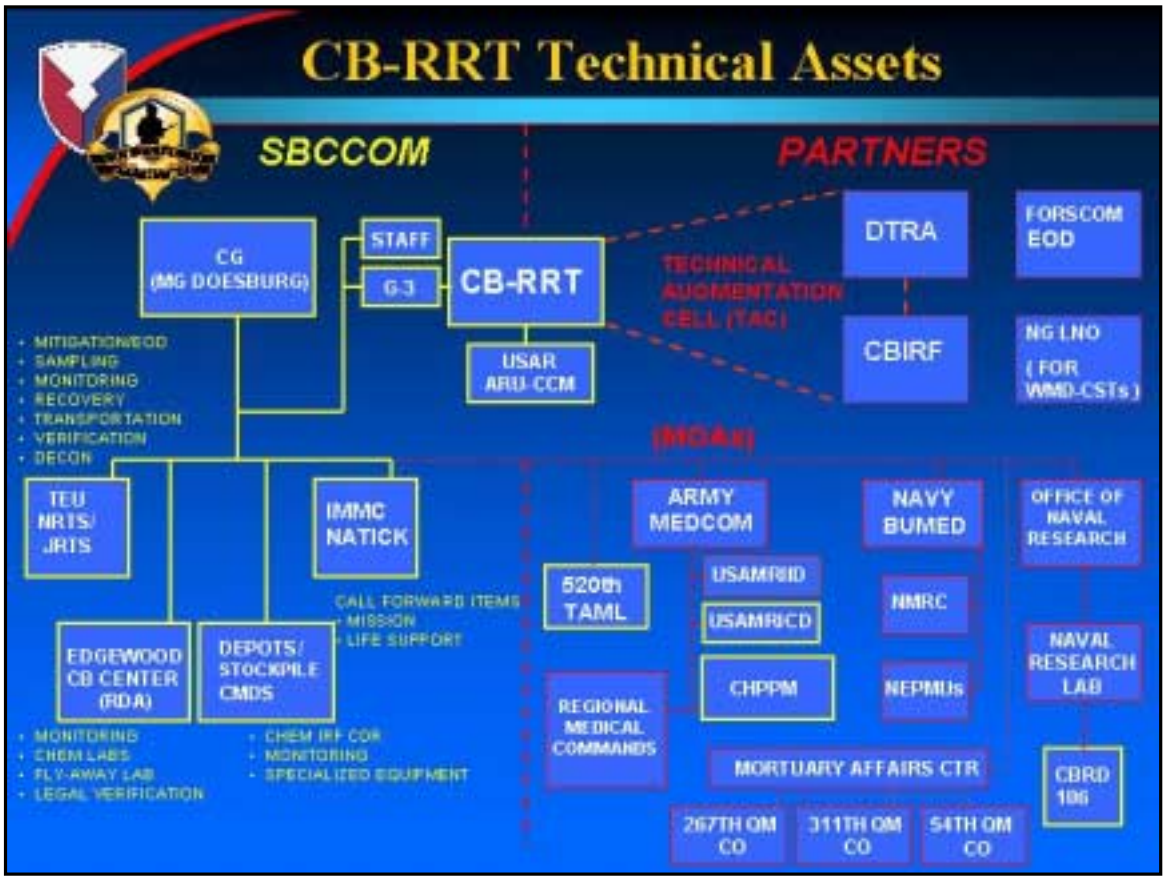

Figure D-1. CB-RRT Capabilities

(5) Planning and Communication Tools. These tools are essential to successfully minimize the impact of actual or potential terrorist attacks. The heart of the CB-RRT's concept of operations is an integrated, self-contained, and deployable command, control, communications, computer, and information (C4I) infrastructure that allows for integrated, structured, and controlled planning and incident response. The CB-RRT deploys with two primary communications systems—the Deployable Communications System (DCS) and the Deployable Response and Graphics Operations Network (DRAGON) System—that are the heart of this C4I infrastructure.

- The DCS is a wireless to wire-line communications gateway system offering increased simplicity, mobility, operational flexibility, and rapid deployment. The DCS is a self-sustaining mobile satellite-communications system which supports the forward-deployed elements with telephone (secure and nonsecure) interface, video teleconference interface, Secret Internet Protocol Router Network (SIPRNET) (dial up), and digital, cellular telephone service that is separate from local networks. The CB-RRT's communications system uses the T1 satellite reach-back capability to link command and control nodes with the SBCCOM's Operations Center and other operations and technical centers.

- The DRAGON system is a communications suite of computers and ancillary hardware that seamlessly integrates all aspects of communication and emergency

planning/response software (see Figure D-2). The DRAGON is a local-area/wide-area computer network (LAN/WAN) designed for multiple users who gain access either by hard wire, satellite, or Internet access. The system is used to provide situational awareness to users and also serves as the main information-management tool for the CB-RRT staff.

Figure D-2. DRAGON System

(6) Additional assets. Additional assets that may support, or be supported by, the CB-RRT include but are not limited to the DTRA, USMC CBIRF, National Guard WMD-CSTs, US Army 52nd Ordnance Group (EOD), and National Capitol Render Safe Organization (NCRSO).

(7) Deployment. The CB-RRT can deploy using US Army SBCCOM organic air assets, US Army Transportation Command (TRANSCOM) assets, or commercial air transportation. The CB-RRT is self-sustaining for 72 hours.

g. US Army TEU.

(1) Mission. The unit provides worldwide, no-notice capability to conduct field sampling, identification, and verification of chemical agents and to monitor, recover, decontaminate, escort, and mitigate hazards associated with CB materials in compliance with international, federal, state, and local laws.

(2) Capabilities. The capabilities of the TEU are multifaceted to include the following:

- Providing technical escort of CB munitions and material.
- Rendering safe and/or disposing of weaponized CB munitions and material.
- Conducting technical intelligence exploitation of foreign CB munitions and material.

- Providing CB response teams to government agencies as required to support national and/or international counterproliferation policies.

- Operating in hazardous environments.

(3) The TEU's basic operational element is the Chemical-Biological Response Team (CBRT). The unit can deploy CBRTs from Aberdeen Proving Ground, Maryland; Dugway Proving Ground, Utah; and Pine Bluff Arsenal, Arkansas. In general, each CBRT is comprised of CB and explosives ordnance disposal specialists, but the team composition can be tailored to the mission. The CBRT can be deployed to suspect or actual incidents involving CB agents, munitions, and other HAZMATs to transport the suspected samples to the appropriate labs. The TEU's CBRTs maintain a rapid-response capability in detection, decontamination (neutralization), containment (packaging), dismantlement (render safe), and disposal (transport and escort only) of WMD containing CB agents or related materials. The CBRT also maintains an information "reach-back" capability to TEU's EOC for communications with CB-agent, explosive-ordnance, and disaster-response SMEs.

h. US Army Explosive Ordnance Disposal Group (EOD).

(1) Mission. The unit provides EOD bomb-squad units to defeat or mitigate the hazards from conventional, nuclear, or chemical military munitions and WMD throughout CONUS as requested by local, state, and federal law-enforcement or military authorities.

(2) Capabilities. The capabilities of the US Army EOD Group are multifaceted to include the following:

- Identifying and rendering safe foreign and US military munitions (chemical, conventional, and nuclear).

- Disposing of munitions encountered and rendering safe terrorist improvised explosive devices (IED) (i.e., pipe bombs, booby traps).

- Responding to WMD incidents.

- Conducting training in military munitions and IED to LEAs.

- Providing support to the US Secret Service (USSS) and DOS.

(3) Components. There are EOD companies that are configured to respond to a WMD incident. These designated companies receive specific training on WMD. They possess unique equipment to counter booby traps and are trained to operate specialized equipment (provided by the DOE) used for diagnostics and for rendering safe/mitigating a WMD nuclear initiation.

i. US Army Biodetection Company (Corps).

(1) Mission. This unit conducts biodetection to provide rapid detection and presumptive identification of large-area biological aerosol attacks.

(2) Capabilities. The Biological Integrated Detection System (BIDS) was developed in response to the biological warfare (BW) agent vulnerability of US forces during Operation Desert Storm. The BIDS is a multicomponent system that provides monitoring, sampling, detection, and presumptive identification of BW agents.

j. US Army Madigan Army Medical Center Disaster-Assistance Response Team (DART).

(1) Mission. The team provides a rapid-deployment unit with triage, ambulatory/litter, and advanced medical/trauma stabilization capabilities for the US Army needs related to NBC incidents in the western US.

(2) Capabilities. The DART's capabilities include triage, decontamination, and stabilization of contaminated and multiple injured casualties. The team has 24-hour access to board-certified toxicologists. Team members have received substantial training in basic and advanced life support, trauma life support, HAZMAT, confined-space medicine, crush-injury medicine, and emergency medical response to terrorism.

k. US Army Response TF East (RTF-E)/Response TF West (RTF-W).

(1) Mission. When directed, a RTF supports the LFA during an incident. The RTF commander may assume OPCON of committed DOD elements (less Special Operations Command [SOCOM] and USACE), coordinates military support of CM operations, and redeploys units when DOD disengagement criteria are met.

(2) Capabilities. The RTF commander establishes a fully functional CP in the vicinity of the incident within 24 hours of notification. He exercises OPCON of all federal DOD resources committed to providing MSCA, provides liaison officers to appropriate civil agencies, and receives liaison officers from appropriate military commands and agencies.

(3) Components. The RTFs are composed of members of the US First and Fifth Army HQ staff. The initial response team establishes initial liaison with the supported civil agencies and coordinates support for the follow-on personnel. The predesignated DCO and DCE serve as special staff augmenting the RTFs.

l. Armed Forces Radiobiology Research Institute (AFRRI) Medical Radiobiology Advisory Team (MRAT).

(1) Mission. The MRAT responds as part of the DTRA's CMAT and is available at all times. The MRAT can provide on-site training to health professionals on the management of nuclear or radiological casualties. The team provides state-of-the-art expertise and advice to commanders and primary-care providers following a nuclear or radiological accident (nuclear weapons, reactor, or radiological material). The MRAT provides access to biodosimetry and bioassay support to incident responders and local health authorities.

(2) Capabilities: The MRAT is a primary source of medical and radiological health information dealing with the management of casualties from nuclear warfare

weapons and radiological dispersal-device accidents. Senior medical experts provide on-site advice to physicians on—

- Resuscitative techniques for radiation injury and radionuclide contamination therapy.

- Use of investigative chelation therapy for internal contamination by radioactive material.

- Therapeutic drug combinations for acute radiation injury, infection, and protection against late-occurring diseases (such as cancer).

- Radiation-injury interventional therapy and dose-estimate bioassay.

(3) Components. The MRAT is in contact with other SMEs at the AFRRI for additional information. The MRAT is led by a physician and is normally comprised of three individuals for initial deployment; additional team members may deploy if the situation dictates. Team members are on call 24 hours a day by either telephone or a pager. The team is equipped with PPE to perform its intended mission, related general-purpose equipment, and supplies.

m. USAMRICD. Medical Chemical Biological Advisory Team (MCBAT).

(1) Mission. The team provides input in the development of operating procedures and training in the management of chemical-agent casualties. The MCBAT also provides clinical advice and consultation in matters related to the initial and long-term management of chemical-agent casualties at the incident site. The experts on this team are from the USAMRICD and the USAMRIID. They provide essential medical information during the recovery phase of the operation for the safe return to normal activities. The MCBAT also provides on-site training to medical professionals on the management of chemical and biological casualties.

(2) Capabilities. The MCBAT is the primary source of medical information dealing with the management of CW-agent casualties for the federal government. Through the FBI or agencies within the DHHS, the MCBAT provides consultation to state, city, or local agencies. As necessary, the MCBAT supervises the collection of biological samples (bodily fluids) for subsequent verification of chemical-agent exposure that can be used to facilitate the confirmation, diagnosis, and treatment.

n. USAMRIID.

(1) Mission. The institute conducts research to develop strategies, products, information, procedures, and training programs for medical defense against BW threats and infectious diseases. It develops products—such as vaccines, drugs, diagnostic tests, and medical management procedures—to protect military personnel against biological attack or against endemic infectious diseases. It supplies medical and scientific SMEs who provide technical expertise and guidance to commanders and senior leaders on the prevention and treatment of hazardous diseases and the management of biological

casualties. It serves as the DOD reference center for identification of biological agents from clinical specimens and other sources.

(2) Capabilities. The USAMRIID has many capabilities that can be employed for assessing and evaluating a biological terrorist incident, from initial communication of the threat through incident resolution. The primary capabilities that the USAMRIID provides are intellectual capability (consulting), extensive fixed confirmatory and reference laboratory facilities, and the Aeromedical Isolation Team (AIT).

o. USMC CBIRF.

(1) Mission. When directed, the CBIRF forward deploys to a domestic or foreign area in order to provide FP and/or mitigation in the event of a WMD incident. The CBIRF is prepared to respond to no-notice WMD incidents with a rapidly deployable Initial Response Force (IRF) and a follow-on force if required. The CBIRF also conducts FP training for fleet units.

(2) Organizational Structure. The CBIRF is composed of 350 to 375 USMC and USN personnel and consists of three elements depicted in Figure D-3. In garrison, the CBIRF is under the OPCON and administrative control (ADCON) of the 4th Marine Expeditionary Brigade Antiterrorism, II Marine Expeditionary Force (II MEF), and Marine Corps Forces, Atlantic (MARFORLANT). The CBIRF is an incident-response force that executes CM operations in support of a CINC or an LFA. The CBIRF has limited organic-equipment decontamination capability but does not conduct detailed equipment decontamination (DED) or area decontamination operations. Furthermore, the majority of CBIRF personnel are trained in Level A and B operations. TIC and TIM are potential threats to US forces, even outside the continental US (OCONUS), since littoral areas include port and industrial complexes where storage and manufacture of these materials are common. The CBIRF also has state-of-the-art monitoring and detection equipment used to identify, sample, and analyze NBC hazards, including TIC and TIM as well as oxygen (O2) and lower explosive levels (LEL).

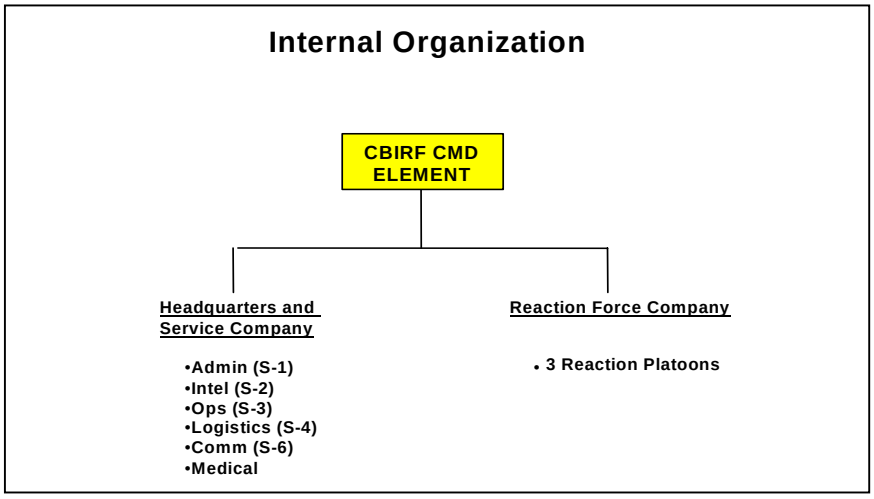

Figure D-3. CBIRF Organizational Structure

(3) Capabilities.

(a) The CBIRF provides C^2 liaison teams to other agencies or commands; interfaces with local and military commanders; coordinates all on-site CBIRF operations; establishes data/voice reach back to scientific and medical advisors; and prepares chemical, biological, or radiological plume models.

(b) Reaction-force-company capabilities may include—

- Conducting agent detection and identification.
- Performing sampling and collection.
- Monitoring concentration and exposure levels.
- Providing decontamination support for unit personnel and first responders.
- Conducting casualty decontamination on scene.
- Conducting victim searches.
- Performing technical rescue and casualty extraction.

(c) Medical-element capabilities include—

- Conducting emergency medical care in contaminated area.
- Performing casualty triage and stabilization.

(d) Initial response-force capabilities include—

- Providing 80 personnel on one-hour alert status.
- Conducting decon for 35 to 50 ambulatory casualties per hour.
- Conducting decon for 20 to 35 nonambulatory casualties per hour.

(e) Follow-on force capabilities of the CBRIF include—

- Conducting decon for 125 to 150 ambulatory casualties per hour.
- Conducting decon for 50 to 75 nonambulatory casualties per hour.
- Providing mobile lab services.

(4) A sample CBIRF organization at an incident site is depicted in Figure D-4.

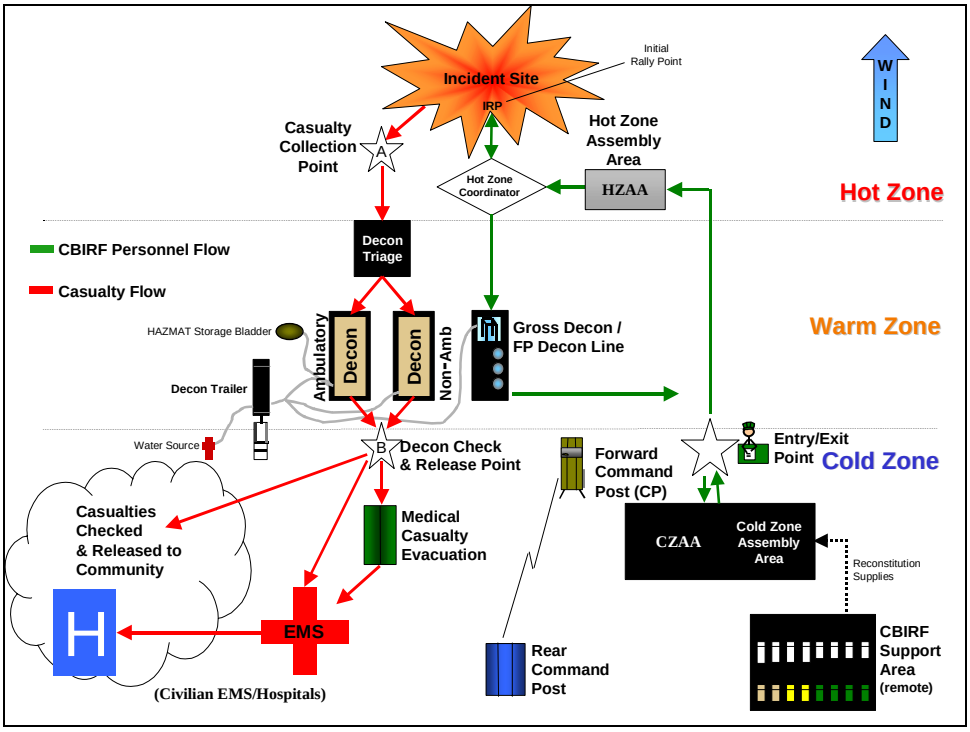

Figure D-4. CBIRF Incident-Site Organization

p. USN Naval Medical Research Center (NMRC).

(1) Mission. The NMRC's mission is to defend members of the armed forces against a biological threat in a theater of operations; therefore, rapid biological-detection methods are essential for prompt medical intervention and successful mission accomplishment. To provide for such needs, the NMRC (Biological Defense Research Program [BDRP]) has formed a scientific research program for the development of rapid detection and identification methods for BW agents.

(2) Capabilities. The BDRP has a transportable biological field laboratory.

(3) Components. The field lab is comprised primarily of commercially available scientific lab equipment except for the hand-held chromatographic assays (i.e., tickets). The field lab can process approximately 50 samples (4 to 5 samples a day for a period of approximately two weeks) before replenishment of supplies is required.

q. USN EOD Units.

(1) Mission. The mission of the unit is to eliminate hazards from ordnance that jeopardize operations conducted in support of the national military strategy by providing specially trained, combat-ready, highly mobile forces. Navy EOD units are employed in a variety of operations, across a wide spectrum of warfare areas, in the execution of this mission.

(2) Capabilities. Navy EOD units are structured for a relatively small footprint and rapid response. EOD units can split into smaller units to respond to multiple EOD incidents/tasks, which are within the capabilities of a smaller force. Each unit is trained in a variety of mobility and survivability skills enabling it to operate in a variety of environments both afloat and ashore. EOD units are capable of responding to underwater and surface ordnance and NBC threats. They can also provide support for diving and demolition, intelligence collection, aircraft and ordnance recovery, range and underwater clearance, riverine operations, Chief of Naval Operations (CNO) projects, Special Warfare (SPECWAR) operations, and other special operations.

r. USAF Radioanalytical Assessment Team (RAT).

(1) Mission. The RAT is a globally responsive specialty asset team that responds to radiation incidents/accidents, providing health physics and radiological support.

(2) Capabilities. The RAT provides field radioanalytical support to the assigned theater medical authority. It measures, analyzes, and interprets environmental and occupational samples for their content of radioactivity, providing expert guidance on the type and degree of radiological hazard that face deployed forces. The RAT can deploy on short notice to assess radiological hazards following a nuclear or radiological incident/accident. The RAT will perform radioanalytical analysis on environmental samples such as swipes, soil, water, air, and foodstuffs and occupational samples such as the whole body, breath, urine, and feces. Analyses results are interpreted for the impact on deployed forces and noncombatants. The information is compiled for use by the medical authority for dose avoidance, dose reduction, dose assessment, risk communication, and additional requirements for effective CM. The team has expertise in areas of health physics, environmental monitoring, radiation measurement, and medical laboratory operations.

s. US Army/USAF WMD-CST (Army/Air Force NG).

(1) Mission. The mission of the WMD-CST is to deploy to an area of operations to assess a suspected incident involving a biological, chemical, or radiological device in support of a local IC; advise civilian responders regarding appropriate action; facilitate requests for assistance to expedite the arrival of additional state and federal assets to help save lives; prevent human suffering; and mitigate great property damage.

(2) Capabilities. The WMD-CST is designed to support local ICs and local emergency responders, as well as mutual support to other WMD-CST elements (see Figure D-5). The WMD-CST is neither designed nor intended to replace functions carried out under the ICS nor to replace those functions normally performed by the emergency first responder community. Prior coordination with emergency first responders in the geographic coverage area facilitates WMD-CST integration into the ICS response planning. The WMD-CST maintains a level of readiness that allows for a response within 4 hours. It has the means to facilitate a rapid recall, permitting expeditious responses to RFAs (from local or state responders) validated by the Adjutant General (or his representative).

NOTE: WMD-CSTs remain as a state response asset; they will not be federalized.

(3) Major Equipment (Detection). The WMD-CST is equipped with a GC/mass spectrometer to identify CB agents. The van-mounted system consists of a Hewlett-Packard 6890 GC and a 5973 Mass Selective Detector (MSD). Detectors that are presently configured for incorporation into the system include the Flame Ionization Detector (FID), the Dual Wavelength Flame Photometric Detector (DWFPD), the Pulse Flame Photometric Detector (PFPD), and the Halogen Selective Detector (HSD). The lab is outfitted with a roof-mounted air conditioner/heater, instrument benches, gas-cylinder storage, and a tool kit. The laboratory configuration incorporates all the utilities necessary to conduct on-site laboratory-based operations. Electrical power is provided by an internal 7-kilowatt diesel generator, and compressed gases are supplied by gas generators.

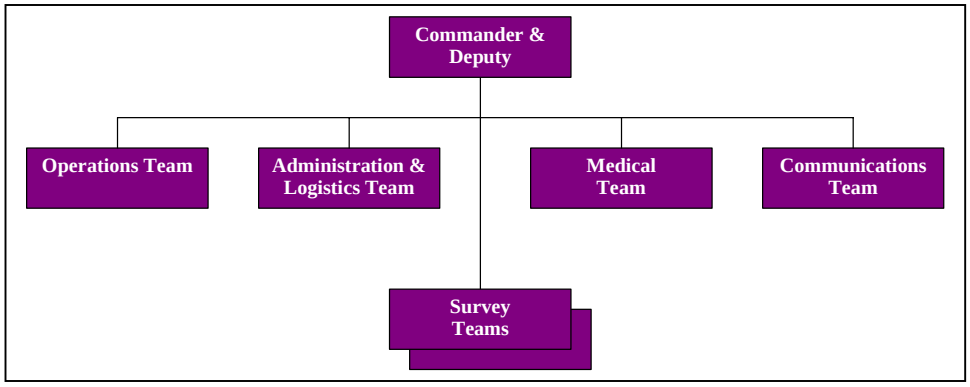

Figure D-5. WMD-CST Organization

t. SMARTs. These teams are organized and equipped to respond to disasters to include NBC incidents. Three SMARTs are designed such that their response to NBC events can provide critical medical support activities. Each US Army Regional Medical Command has a Chemical/Biological SMART (identified as SMART-CB). The US Army Veterinary Command has four Food Safety, Veterinary Preventive Medicine, and Animal Health Care SMARTs (identified as SMART-V). The US Army Center for Health Promotion and PVNTMED has three PVNTMED Threat-Assessment SMARTs (identified as SMART-PM). Additional types of SMARTs are also organized and equipped for a rapid response. For additional information on SMARTs, see FM 8-42.

u. SMART-PM.

(1) Mission. The mission of the SMART-PM is to provide initial disease and environmental health threat assessments. This is accomplished before or in the initial stages of a contingency operation or during the early or continuing assistance stages of a disaster.

(2) Capabilities. Although the basic SMART-PM is standardized, it may be tailored to the requirements of the specific mission if the Commander, US Army Medical Command (USAMEDCOM) determines additional specialties are needed. It can—

- Perform on-site initial medical threat assessments, limited and rapid hazard sampling, monitoring and analysis, health-risk characterization, and needs assessment for follow-on PVNTMED specialties or other medical treatment support in the incident site or AO.

- Prepare PVNTMED estimates.

- Perform analysis of, but not limited to, endemic and epidemic disease indicators within the incident site or AO; environmental toxins related to laboratories; production and manufacturing facilities, nuclear reactors, or other industrial operations; and potential NBC hazards.

- Provide medical threat information and characterize the health risk to deployed forces or civilian populations.

- Provide guidance to local health authorities on surveying, monitoring, evaluating, and controlling health hazards relative to naturally occurring and man-made disasters.

- Assist local health authorities in surveying, monitoring, evaluating, and controlling health hazards relative to naturally occurring and man-made disasters.

v. SMART-CB.

(1) Mission. The SMART-CB consists of trained medical teams that can deploy in response to a chemical, biological, or radiological incident. Examples of incidents that may require a rapid response include—

- An accident involving the transport or storage of weapons.

- The release of CW or BW agents or radiological material.

- A leak of an industrial chemical, infectious material, or radioactive material.

(2) Capabilities. The SMART-CB can provide medical advice and consultation to commanders or local medical and political authorities for preparation of a response to a threat or actual incident. It can also provide medical advice to commanders or local authorities on the protection of first responders and other health-care personnel, casualty decontamination procedures, first aid (for nonmedical personnel) and initial medical treatment, and casualty handling. The initial advice includes signs, symptoms, first aid (self-aid, buddy aid, and combat lifesaver aid for military personnel), and initial treatment when an incident has occurred. It also assists in facilitating the procurement of needed resources. During an incident response, all response personnel must first protect themselves from the agent/material and then provide response assistance to victims. The SMART-CB will conduct the initial response. Upon arriving at the incident site or AO, it will determine the types and number of other responders required. The SMART-CB may,

after initial assessment of the situation, elect to use telemedicine reach back or call in domestic or foreign response assets organized at the national level.

w. SMART-V.

(1) Mission. The mission of the SMART-V is to assess the degree of existing destruction and/or impending risk and to determine recommended follow-on actions relative to animal health and food safety. The SMART-V also advises local first responders on food safety/veterinary PVNTMED issues as well as triage and treatment of injured animals; provides limited triage and emergency treatment of injured animals including lifesaving emergency procedures, or when appropriate, euthanasia to prevent undue suffering of those cases encountered during the assessment process; and provides veterinary care for military search and rescue dogs. When authorized, it also provides care to other governmental and nongovernmental agencies' animals participating in the operation.

(2) Capabilities. The SMART-V can assess food contamination and the potential for food-borne illness outbreaks, determine the magnitude of animal involvement in public health and zoonotic disease threats, make initial assessments and recommend corrective actions, provide liaison with follow-up relief organizations/agencies, assist in establishing control for the incident site or AO, and coordinate with all known animal-medicine/food-safety agencies and organizations in the incident site or AO.

x. USAF Theater Epidemiology Team (TET).

(1) Mission. The TET provides threat assessments of environmental and occupational factors, evaluates infectious disease risks and disease/nonbattle injury (DNBI) rates from all sources, and recommends interventions to minimize degradation of mission staff. These tasks are accomplished as part of the initial site/theatre assessment and during ongoing operations and disease and environmental health-threat assessments.

(2) Capabilities. The TET is a light, mobile, multidisciplinary team with limited environmental/occupational sampling equipment. It uses a portable high-end computing capability. It uses a communication infrastructure that allows for theatre-wide data collection; coordination with JTF, AFFOR, and combatant command surgeon general staffs; linkage with other PVNTMED teams (e.g., an AF Preventive Aerospace Medicine Team, a US Army SMART-PM); and an immediate reach back to SMEs at the Air Force Institute for Environment, Safety, and Occupational Health Risk Analysis (AFIERA).

(3) Components. The TET has a standardized, 5-person team that consists of a PVNTMED physician, a public-health officer and supporting technician, and a bioenvironmental engineer and supporting technician. The composition can be tailored to include other specialties (e.g., tropical medicine, laboratory officer, entomologist). The basic allowance standard includes basic bioenvironmental sampling equipment and supplies. The Ruggedized Advanced Pathogen Identification Device (RAPID) with selected probes and primers is available to assist with biological-agent identification during outbreak investigations (because the RAPID is not a stand-alone biological detector, it requires laboratory personnel to operate it).

y. US Army Reserve Component (RC) Decontamination-Capable Companies (US Army Reserve [USAR] and US Army National Guard [ARNG]).

(1) Mission. The domestic response mission of these units is to provide casualty decontamination in support of CM operations.

(2) Capabilities. These units, while designed for overseas deployment, have also been tasked by the SECDEF to provide domestic-response casualty decontamination (DRCD) in support of CM. These units are neither designed nor intended to replace functions carried out under the ICS nor to replace those functions normally performed by the emergency first-responder community. Instead, these units provide additional capability as needed to support the nation. Using the formal military assistance to civil authorities system is how these assets are formally requested for support. The best use of these units is for them to be pre-positioned in preparation for a high-threat, high-visibility event, such as the Olympic Games. These units are not designed for a rapid response but can be mobilized and deployed within days.

(3) Components. These units are equipped with a platoon set of domestic-response-style equipment to decontaminate both ambulatory and nonambulatory casualties. The set includes a quickly erectable tent with runoff containment included for the actual decontamination, two other tents for sun protection for the workers and victims, showers for washing and rinsing, and rollers for decontaminating nonambulatory victims.

z. US Army RC Chemical-Reconnaissance-Capable Companies (USAR and ARNG).

(1) Mission. The domestic-response mission of these units is to provide dismounted NBC reconnaissance.

(2) Capabilities. The standard Chemical Reconnaissance Companies or elements smaller than companies, while designed for overseas deployment, have also been tasked by the SECDEF to provide dismounted NBC reconnaissance. These units are neither designed nor intended to replace functions carried out under the ICS nor to replace those functions normally performed by the emergency first-responder community. Instead, these units provide additional capabilities as needed to support the nation. Using the formal military assistance to civil authorities system is how these assets are formally requested for support. The best use of these units is for them to be pre-positioned in preparation for a high-threat, high-visibility event, such as the Olympic Games. These units are not designed for a rapid response but can be mobilized and deployed within days.

(3) Components. These units are equipped with enhanced chemical and radiological detection equipment (multigas detectors, commercial chemical-detection equipment, and AN/PDR-77 radiacmeters) and Commercial OSHA Level A equipment (i.e., suits, SCBA, and decontamination capability) to allow them to operate with local first responders throughout the nation. These units also have the capability to work soldiers in all OSHA protection levels.

aa. Other Federal Response Assets.

(1) DOD.

- AFRRI. This is DOD's sole laboratory for conducting biomedical research to address military medical operational requirements for dealing with the prompt and delayed effects of radiation exposure. AFRRI is currently assigned to the Uniformed Services University of the Health Sciences (USUHS).

- Air Force Technical Applications Center (AFTAC). AFTAC (located at Patrick AFB, Florida) provides postdetonation plume trajectory prediction, meteorological modeling, complete plume analysis/characterization, and leading-edge technology development for monitoring of CB activities.

- US Army Radiological Advisory Medical Team (RAMT). Specially trained in radiological health matters, this team can provide assistance and guidance. Teams are located at the Walter Reed Army Hospital, District of Columbia, and at the US Army CHPPM, Europe, Landstuhl, Germany.

- US Army Radiological-Control (RADCON) Team. This team is organized to provide radiological monitoring support and advice to the Centralized Recovery and Treatment Facility (CRTF). The team is capable of deploying within several hours from Fort Monmouth, New Jersey.

- Chemical Stockpile Emergency Preparedness Program (CSEPP). The CSEPP is a joint FEMA and Army program in which local assets are supplemented to respond to incidents/accidents at each of the eight chemical-agent stockpile locations. Through this program, the Army provides technical assistance and required resources in developing and implementing emergency-response plans and related preparedness capabilities, integrating the on- and off-post planning process.

- Defense Technical Response Group (DTRG). The DTRG is a deployable team of civilian DOD scientists that provides specialized one-of-a-kind equipment and on-scene technical advice to EOD operations during the access to and disruption phases of a WMD incident. The DTRG has a 4-hour mission-response time and an Air Force airlift mission in place.

- Air Force and Navy Meteorology and Oceanography (METOC) agencies. Global, regional, and tactical METOC units are available worldwide to provide meteorological operations in support of WMD incidents. The DOD METOC agencies are available to provide worldwide meteorological support when required.

- The Mortuary Affairs Center, Fort Lee Virginia, provides expert advice and assistance, in conjunction with the medical and medical examiners' offices, on managing, treating, and handling contaminated casualties.

(2) DOT.

- USCG Federal On-Scene Coordinators (FOSCs). Under the authority of the NCP, USCG FOSCs coordinate all federal containment, removal, and disposal efforts and resources during an incident in the coastal zone.

- National Strike Force (NSF). The USCG NSF provides 24-hour access to special decontamination equipment for chemical releases and advice to the OSC in hazard evaluation, risk assessment, multimedia sampling and analysis, on-site safety, clean-up techniques, and more. The NSF has portable chemical-agent instrumentation that is capable of detection and identification, as well as entry-level capabilities using Levels A through C PPE. Other NSF capabilities include pumping, cost documentation support, and contractor monitoring oversights.

(3) FEMA.

- Urban Search and Rescue Team (USRT). The USRTs save lives and protect property from both natural and man-made catastrophic urban disasters. The USRTs have a limited HAZMAT capability.

- Rapid-Response Information System (RRIS). The RRIS is a database containing information on federal NBC response capabilities, NBC agents and munitions characteristics, and safety precautions.

(4) DHHS.

- Metropolitan Medical Strike Team (MMST). The MMSTs operate as a specially organized team. Their capabilities include agent detection and identification, patient decontamination, triage and medical treatment, patient transportation to hospitals, and coordination with local law-enforcement activities. Twenty-seven teams have been initiated. The federal government's goal is to develop MMSTs for the 100 most populous cities in the US.

- National Medical-Response Team (NMRT). The NMRTs are comprised of medical personnel. These teams are capable of agent identification, patient decontamination, triage, and medical treatment in support of local health systems. There are three NMRTs.

- Center for Disease Control and Prevention (CDC). The CDC's capabilities are epidemiological surveillance, biological-agent identification, and public-health consultation and response.

- Agency for Toxic Substance and Disease Registry (ATSDR). The ATSDR provides consultation and advice on issues relating to the release or threatened release of hazardous substances.

- Federal Drug Administration (FDA). The FDA provides regional laboratory support and surveillance assistance in support of public health.

- Substance Abuse and Mental Health Services Administration (SAMHSA). The SAMHSA provides mental-health support and crisis counseling during emergencies.

(5) FBI.

- Hazardous-Materials Response Unit (HMRU). The HMRU has specialized sampling, detection, and identification capabilities of NBC agents. It is also equipped with a variety of personal protective (OSHA Levels A through C) and rescue equipment.

- Evidence Response Teams (ERTs). The ERTs main functions are crime-scene documentation and evidence collection in support of criminal investigations. Some ERTs are HAZMAT trained.

- Critical-Incident Response Group (CIRG). These teams are specially assembled to conduct tactical and crisis-management efforts.

- Intelligence Collection and Analysis. The FBI has experts that contribute to and coordinate detailed interagency threat-assessment activities.

(6) EPA.

- OSCs. Under the authority of the NCP, EPA OSCs coordinate all federal containment, removal, and disposal efforts and resources during an incident.

- Environmental Response Team (ERT). The EPA's ERT provides 24-hour access to special decontamination equipment for chemical releases and advice to the OSC in hazard evaluation, risk assessment, multimedia sampling and analysis, on-site safety, clean-up techniques, and more. The ERT has portable chemical-agent instrumentation that is capable of detection and identification in the low and sub parts per million, as well as entry-level capabilities using Levels A through C PPE.

- Radiological Emergency-Response Team (RERT). The EPA's RERT provides on-site monitoring and mobile laboratories for field analysis of samples, along with expertise in radiation health physics and risk assessment. The RERT is accessible 24 hours per day.

- Environmental Radiation Ambient Monitoring System (ERAMS). The EPA operates the ERAMS for monitoring radioactivity in samples of precipitation, air, surface water, drinking water, and milk. In the event of a radiological emergency, sampling at the approximately 260 monitoring sites can be increased to provide information on the spread of contamination.

- Radiation Environmental Laboratories. The EPA has two state-of-the-art radiological laboratories in Montgomery, Alabama, and Las Vegas, Nevada. By quickly characterizing radiation sources, they can offer advice on how best to protect public health in emergency situations.

- EPA Research Laboratories. The EPA's 12 research laboratories offer programs in field monitoring, analytical support, and other technical support to quality-

assurance programs related to air, water, wastewater, and solid waste. Five of these laboratories are capable of deploying mobile units to a contaminated site for CB analysis.

- National Enforcement Investigations Center (NEIC). The EPA's NEIC offers expertise in environmental forensic evidence collection, sampling, and analysis; computer forensic and information management; and enforcement related analysis.

(7) DOE.

- Radiological Assistance Program (RAP). The RAP provides the initial DOE radiological emergency response. Under the RAP, there are several RATs to assist in identifying the presence of radioactive contamination on personnel, equipment, and property at the incident or accident scene. These teams also provide advice on personnel monitoring and decontamination and material recovery.

- Radiation Emergency-Assistance Center/Training Site (REAC/TS). The REAC/TS provides 24-hour medical consultation on health problems associated with radiation accidents. It also provides training programs for emergency-response teams comprised of health professionals.

- Nuclear Emergency Search Team (NEST). The NEST provides technical responses to the resolution of incidents involving improvised nuclear and radiological dispersal devices. The team is able to search, locate, and identify devices or material.

- Joint Technical Operations Team (JTOT). The JTOT is a combined DOD and DOE team that provides technical advice and assistance to the DOD.

- Aerial Measuring System (AMS). The AMS can be mounted on helicopters and fixed-wing aircraft to respond to radiological emergencies. Its capabilities include aerial radiation surveys and search (gamma spectroscopy), real-time radiological aerial sampling, aerial photography survey, and aerial multispectra scanning surveys.

- Atmospheric-Release Advisory Capability (ARAC). The ARAC provides real-time computer predictions of the atmospheric transport of radioactivity from a nuclear incident or accident.

Appendix E

TECHNICAL REACH-BACK CAPABILITIES

1. Background

a. Technical reach back is the ability to contact technical SMEs when a technical issue exceeds the on-scene SMEs' capability. Reach back should be conducted using established unit protocols. Many of the listed reach-back resources have other primary missions and are not specifically resourced for reach back. Issues may include the following:

(1) Nonstandard Agent Identification of NBC Warfare Agents and TIM. Military responders are trained to detect and identify certain military warfare agents. If a TIM is used or is suspect, then military personnel must obtain technical information. This technical information could include persistency, medical effects, and decontamination or protection requirements.

(2) Modeling. During CM operations, the spread of contamination must be limited. Technical reach back should provide the ability for detailed analysis of the area to assist in determining downwind hazard areas and locating staging areas, operations centers, decontamination sites, etc.

(3) NBC-Agent Sample Evacuation. Sample evacuation can be an important part of CM and crisis management. Evacuation of samples can provide critical information for patient treatment and/or be used as evidence for prosecution.

(4) Hazard Prediction. Technical experts can use modeling to provide a better indication of where vapor, liquid, or aerosolized hazards may occur.

b. Reach back can be accomplished through various means, from the telephone to broadband satellites; however, information management protocols and chain of command must be followed before using any hot-line number.

2. National Response Center (NRC) and Chemical/Biological Hot Line (1-800-424-8802)

The NRC mans the hot-line service and serves as an emergency resource for first responders to request technical assistance during an incident. The hot line's intended users include trained emergency personnel such as emergency operators and first responders (i.e., firefighters, police, and emergency medical technicians who arrive at the scene of a CB terrorist incident). Other potential users may include the state's EOCs and hospitals that may treat victims of agent exposure.

a. The USCG operates the NRC and its trained operators staff the hot line seven days a week, 24 hours a day. Operators use extensive databases and reference material in addition to having immediate access to the nation's top SMEs in the field of NBC agents. NRC duty officers take reports of actual or potential domestic terrorism and link emergency

calls with applicable SMEs (i.e., US Army SBCCOM, USAMRICD) for technical assistance and with the FBI to initiate the federal response actions. The NRC also provides reports and notifications to other federal agencies as necessary. Specialty areas include the following:

- Detection equipment.
- PPE.
- Decontamination systems and methods.
- Physical properties of CB agents.
- Toxicology information.
- Medical symptoms from exposure to CB agents.
- Treatment of exposure to CB agents.
- Hazard-prediction models.
- Federal response assets.
- Applicable laws and regulations.

b. The CB hot line is a joint effort of the USCG, FBI, FEMA, EPA, DHHS, and DOD. The NRC is the entry point for the CB hot line. The NRC receives basic incident information and links the caller to the DOD and FBI's chemical, biological, and terrorism experts. These and other federal agencies can be accessed within a few minutes to provide technical assistance during a potential CB incident. If the situation warrants, a federal response action may be initiated.

c. Use the local established policies and procedures for requesting federal assistance before contacting the CB hot line. State and local officials can access the hot line in emergency circumstances by calling 1-800-424-8802.

3. Defense Threat Reduction Agency (DTRA)

DTRA can provide technical reach-back information and services for on-scene personnel. The focal/coordination point for support is through the DTRA Emergency Operation Center (1-877-244-1187). Example capabilities that the DTRA can contribute are described in Appendix D.

4. Armed Forces Radiobiology Research Institute (AFRRI) (301) 295-0316 or (301) 295-0530; FAX (301) 295-0227

The AFRRI can provide DOD technical support capability for nuclear/radiological incidences or accidents. See Appendix D for information on the AFRRI response-team capabilities.

5. US Army Medical Research Institute of Infectious Diseases (USAMRIID) (1-888-USA-RIID)

The USAMRIID provides medical and scientific SMEs and technical guidance to commanders and senior leaders on prevention and treatment of hazardous diseases and prevention and medical management of biological casualties. The USAMRIID serves as the DOD reference center for identification of biological agents from clinical specimens and other sources. The USAMRIID can provide technical guidance for assessing and evaluating a biological terrorist incident, from initial communication of the threat through incident resolution. See Appendix D for additional information on the USAMRIID's capabilities.

6. US Army Medical Research Institute of Chemical Defense (USAMRICD) (1-800-424-8802)

The USAMRICD provides medical and scientific SMEs and technical guidance to commanders and senior leaders on prevention and treatment of chemical casualties. The USAMRICD can provide technical guidance for assessing and evaluating a chemical terrorist incident, from initial communication of the threat through incident resolution. See Appendix D for additional information on the USAMRICD's capabilities.

7. National Domestic Preparedness Office (NDPO) (202) 324-8186

The NDPO coordinates all federal efforts to assist state and local first responders with planning, training, equipment, and exercises necessary to respond to an incident as an office under the FBI/Department of Justice (DOJ). The NPDO—

a. Supports functional program areas for domestic preparedness. An improved intelligence and information-sharing apparatus underpins the services provided to the federal, state, and local responder community to distribute lessons learned, asset/capabilities information, and general-readiness knowledge.

b. Coordinates the establishment of training curriculum and standards for first-responder training to ensure consistency based upon training objectives and to tailor training opportunities to meet the needs of the responder community.

c. Facilitates and coordinates the efforts of the federal government to provide the responder community with detection, protection, analysis, and decontamination equipment necessary to prepare for and respond to an incident involving WMD.

d. Seeks to provide state and local governments with the resources and expertise necessary to design, conduct, and evaluate exercise scenarios involving WMD.

e. Is responsible for harmonizing federal, state, and local WMD preparedness planning and policy.

f. Communicates information directly to the state and local emergency-response community through the Internet; the Law-Enforcement Online Internet; special bulletins; and *The Beacon*, a monthly newsletter.

g. Ensures that the health and medical community perspectives and needs are coordinated and fully incorporated into other NDPO program areas and are reflected as a priority in the overall NDPO program.

h. Contact Information:

- Days Available: Monday – Friday, 8 a.m. to 5 p.m. EST
- Telephone: 202-324-8186

Appendix F

DEPARTMENT-OF-DEFENSE INSTALLATION FORCE-PROTECTION PLANNING CONSIDERATIONS

1. Background

This appendix supports installation WMD response planning and provides example-planning information. This appendix provides a guide for use in support of preparing an installation WMD AT/FP response appendix. As part of the process, planners review the risk assessment completed in the installation's FP plan, examine their available response capability, and develop countermeasures in the event of a possible WMD incident.

2. AT/FP Planning Process

As part of the AT/FP planning process, see Figure F-1 for AT planning and response elements that could be used to contribute to installation preincident planning for postincident-related actions. Further, see Figure F-2 for basic planning considerations (in an OPLAN format) to also help facilitate AT/FP response templating and planning.

AT Planning and Response Elements: These elements contribute to the installation's ability to deter and employ countermeasures in the preincident threat condition (THREATCON) measures implementation mode and to respond, mitigate, and recover from a terrorist incident in the postincident response mode.

This planning tool uses sixteen planning and response elements, which combine joint-service vulnerability-assessment elements and FEMA's ESFs as a baseline for planning.

Specific functions exist on all installations that support the installation's ability to either deter or respond to terrorist threats and incidents. The installation may use the sixteen elements provided or break down or rebox to whatever level of detail is deemed necessary by the local command or staff. The following, however, are the recommended (this ensures continuity and comprehensiveness in preparation for vulnerability assessments) AT planning and response elements that will ensure the installation has considered all its functional areas and activities during its planning for both preincident and postincident activities. Using FEMA's ESFs ensures that incoming support can easily transition into the appropriate areas of expertise on the installation if federal assistance is required.

Element Number 1—Intelligence Process: This element focuses on how the installation at all levels deals with the intelligence process (e.g., planning/direction, collection, processing, and dissemination). The lead for this is the installation's Intelligence Officer (G2/J2).

Element Number 2—Information and Planning: This element focuses on preparing the installation to respond to a terrorist attack. In the event of a terrorist incident, the installation must coordinate a large contingent of internal and external support organizations for an effective incident response capability. The subtasks are MOAs and memorandums of understanding (MOUs), C^2, EOC, and public information. The lead for this is the installation's chief of staff.

Element Number 3—Installation's AT Plan and Programs: This element focuses on the overall AT posture of the installation, including implementation of THREATCON measures, AT and emergency response plans, exercises, and personnel awareness and training. It also includes how the installation responds to threats with the appropriate use of THREATCONs. The lead for this is the installation's AT officer.

Figure F-1. AT Planning and Response Elements

Element Number 4—Installation Perimeter Access: This element focuses on the installation's ability to secure the perimeter against and control the access of a terrorist threat to include—

- Entry procedures.
- A high-speed approach.
- An observable, existing guard force.
- Vehicle searches.
- Procedures for observing and reporting suspicious activity.
- Placement of barriers, lighting, and gates.

The lead for this is the installation's provost marshal (PM) and the security office.

Element Number 5—Security System Technology: This element focuses on the technology components of the installation's security system to include—

- Alarm systems.
- Data-transmission media.
- Interior/exterior sensors and detection systems.
- Access points.
- Closed-circuit television coverage.

The lead for this task is the installation's PM and the security office.

Element Number 6—Executive and Personnel Protection: This element focuses on protecting very important persons (VIPs) and high-visibility personnel on an installation (including home and office locations) and marking parking spaces, vehicles, and routes to and from work. The lead for this is the installation's PM and the security office.

Element Number 7—Mail Handling Systems: This element focuses on the installation's ability to secure, handle, and inspect incoming mail for possible terrorist threats. This includes procedures to report and investigate suspected items. The lead for this is the installation's administrative officer.

Element Number 8—Communication: This element focuses on an installation-wide system, which should be in place, for exchanging information about a terrorist threat or incident (e.g., dedicated alert system, giant voice). In the event of a terrorist incident, communications personnel must be able to respond to changing needs during the incident and be able to maintain (over a prolonged period) control of all incoming and outgoing communications, as well as, the communications channels included in the AT plan. The installation must have communications equipment that is compatible with the installation's response personnel and those external resources providing potential support. The lead for this is the senior communications officer.

Figure F-1. AT Planning and Response Elements (Continued)

Element Number 9—Incident Response and Recovery: This element focuses on the installation's ability to mitigate the effects and recover from a terrorist incident and resume normal operations (i.e., decontamination, mass care). This is a vulnerability assessment element and as a major category includes the remaining response elements Numbers 10 through 16. (However, to ensure inclusive and comprehensive planning, it is recommended that Numbers 10 through 16 be assessed as stand-alone elements.) The lead for this is the OSC or the senior fire official.

Element Number 10—Fire Fighting: This element focuses on the overall fire-protection system of an installation to include—

- Fire-department availability and capabilities.
- Building design and construction.
- Automatic fire-suppression systems.
- Alarm sensors and training.

In the event of an incident, fire-fighting response elements detect/suppress fires and WMD, effect rescue, render life-saving first aid, and provide water to the decontamination efforts. The lead for this could be the senior fire official.

Element Number 11—Hazardous Material: This element focuses on the expertise necessary to respond to a WMD incident on the installation. The first responders or Incident Response Team must be trained and equipped in HAZMAT response; they should be able to arrive immediately on the incident site, detect the presence of chemical/radioactive agent, assess the situation, advise the EOC, mitigate the situation (as resources dictate), and have reach-back capability for follow-on forces, as the situation dictates. A biological incident warrants a different type of response. The lead for this could be the senior fire official or the senior HAZMAT officer.

Element Number 12—Health and Medical Services: This element focuses on public health and medical care that the health and medical services provide following a terrorist incident, both at the incident site and in hospitals. The use of WMD weapons or systems will create large numbers of casualties in short periods, compromise both the quality and quantity of health care delivered by posing a serious contamination threat to medical personnel, constrain mobility and evacuation, and contaminate the logistical supply base. These factors have the potential of severally degrading health-care delivery and require detailed planning. The lead for this is the senior medical officer.

Figure F-1. AT Planning and Response Elements (Continued)

Element Number 13—Security: This element focuses on the military police, security, and response forces' performance to include their contribution to deterrence, detection, and delay and their response to terrorist activity, including activity with local police and response agencies. In the event of an incident, the security forces of an installation must provide physical security of the incident site and may conduct postincident investigations or must notify the proper investigative authorities. The site of a terrorist incident is a crime scene; the FBI (if CONUS) or the DOS (if OCONUS) must be notified. Witness testimony, physical evidence, and photographic evidence are important in pursuing leads on suspected terrorists. Security forces must maintain a continuous chain of custody on evidence obtained during an incident by documenting the location, control, and possession of the evidence from the time of custody until presenting the evidence to other authorities or in court. The lead for this is the installation's PM and the security office.

Element Number 14—Resource Support: This element focuses on the operational support necessary to obtain, maintain, store, move, and replenish material resources required to respond to the threat of a or an actual terrorist incident on the installation. This includes the ability to protect the means and the operators during the response support. The lead for this is the senior logistics officer.

Element Number 15—Mass Care: This element focuses on the coordination efforts necessary to provide sheltering, feeding, and emergency relief supplies following a terrorist incident. The provision of emergency shelter for disaster victims includes the use of preidentified shelter sites in existing structures, the creation of temporary facilities such as tent cities or the temporary construction of shelters, and the use of similar facilities outside the disaster-affected area if evacuation is necessary. There may be a need to provide food to victims and emergency workers. The lead for this is the senior logistics officer or the base engineer.

Element Number 16—Public Works: This element focuses on the efforts of public works to ensure that all facilities remain operational, damage is remedied or mitigated, and full recovery of affected elements is accomplished in a timely manner to allow for the recovery of the installation to normal operations after a WMD incident. The lead for this is the base engineer.

Figure F-1. AT Panning and Response Elements (Continued)

TASK ORGANIZATION: The installation must be prepared to implement the THREATCON measures in the form of preplanned, preincident action sets at increased THREATCONs. Most importantly, the installation must be prepared to respond if a WMD incident takes place. All installation personnel are responsible for developing a high state of readiness and responding to support this plan. Designate all organizations present for installation AT defense either here or, if voluminous, in an annex. Include the AT requirements of HN, US, and other civilian organizations quartered within the installation. The commander should consider each unit's ability to assist in the installation's AT plan.

NOTE: Certain OCONUS installations are not authorized to discuss/reveal AT WMD planning with the HN. Recommend planners consult the installation's legal advisor to determine any such prohibitions.

NAME/LOCATION: Designate the installation's name, to include any short title or nicknames if they exist, and the exact location of the installation using universal transverse mercator/global-positioning system (UTM/GPS) coordinates.

MAPS OR CHARTS: Designate a reference to all maps and charts that apply to the installation's AT plan. Consider including an installation grid map, highlighting major infrastructures, utilities, and stockpiles. Use overlays to identify decontamination points; equipment storage and exchange points; field-expedient, decontamination equipment locations (such as fire-fighting equipment, pumps, and heavy machinery); evacuation routes; casualty collection points; and protection shelters. Additionally, due to the importance of environmental effects on WMD, consider including any relevant meteorological issues (e.g., prevailing winds). The installation commander and staff can use these maps during the AT planning and execution process.

TIME ZONE: Designate the time zone of the installation. Indicate the appropriate number of hours to calculate (plus/minus) Greenwich mean time (Z time).

REFERENCES: Designate either a compilation of DOD, joint, and service publications or the selected reference list the installation develops to include MOAs/MOUs pertinent to the AT plan.

1. SITUATION:

a. General: This plan applies to all personnel assigned or attached to the installation. DESCRIBE the political/military environment in sufficient detail for subordinate commanders, staffs, and units to understand their role in the installation's AT operations.

b. Enemy Forces: The enemy is any adversary capable of threatening the installation's personnel, facilities, and equipment. Designate the general threat of terrorism to the installation, to include the intentions and capabilities, identification, composition, disposition, location, and estimated strengths of hostile forces. Include the general threat of terrorist use of WMD against the installation.

Figure F-2. AT Planning Considerations (OPLAN Format)

This information should remain unclassified. See paragraph 1f on identifying specific threats.

c. Friendly Forces: Designate the forces available (both military and civilian) to respond to a terrorist WMD attack. Include the next higher HQ and adjacent installations and any units/organizations that are under the installation's HQ command that may be required to respond to such an incident. These units/organizations may include HN and US military police forces; fire and emergency services; medical; federal, state, and local agencies; SOF; engineers; detection, decontamination, or smoke units; and EOD units. Include MOAs/MOUs and any other special arrangements that will improve forces available to support the plan. If in CONUS, the DOJ is responsible for coordinating all federal agencies and DOD forces assisting in the resolution of a terrorist incident. If OCONUS, the DOS is the lead agency.

d. Attachments and Detachments: The installation should develop a process for identifying and tracking individuals/units who are not permanently assigned to the installation. Consider including the ability to gather their WMD defensive status. Designate this process and identify the people, staff, or unit responsible. Also enter the attached or detached units. Incorporate any reserve units that are mustering and/or training at the installation. At increased THREATCON, consider providing nonpermanent duty personnel with an information packet, containing general information on where to obtain protective equipment, where to go, what to do, and other particulars in the event of a terrorist WMD incident.

e. Assumptions: Designate all critical assumptions used as a basis for this plan. Assumptions are those factors that are unlikely to change during the implementation of the installation's AT plan. They may range from troop strength on base to the major political/social environment in the surrounding area. Examples are as follows.

(1) The installation is vulnerable to theft, pilferage, sabotage, and other threats. It is also vulnerable to a WMD attack.

(2) An act of terrorism involving WMD can produce major consequences that will overwhelm almost immediately the capabilities of the installation.

(3) Security personnel, both military and civilian, may be insufficient to provide total protection of all installation resources; therefore, the principal owner or user of a facility, resource, or personnel must develop adequate unit awareness and safeguard measures.

(4) No single unit on the installation possesses the expertise to act unilaterally in response to WMD attacks.

(5) Responders will not put their own lives at risk if protective equipment is not available.

(6) Local, nonmilitary response forces will arrive within specified times.

Figure F-2. AT Planning Considerations (OPLAN Format) (Continued)

(7) After notification, units specializing in WMD response will arrive according to an established schedule.

(8) The HN is supportive of US policies and will fulfill surge requirements needed to respond to a WMD incident according to MOAs/MOUs.

f. Intelligence: Designate the person, staff, or unit responsible for intelligence collection and dissemination. The installation commander must have a system in place to access current intelligence. National-level agencies, CINCs, and intelligence systems provide theater or country threat levels and threat assessments. Obtain these assessments as they will serve as a baseline for the installation's tailored assessment. The installation should have a process in place for developing the installation's tailored threat assessment or "local threat picture." As directed by the installation commander, the installation's threat assessment should be continuously evaluated, updated, and disseminated, as appropriate. The commander should determine the frequency and the means of dissemination of the installation's tailored AT plan. The Defense Intelligence Agency (DIA) does not issue a Threat Level for CONUS installations; the FBI has that responsibility. Therefore, the installation must obtain the terrorist Threat Level by querying the FBI through the installation's law-enforcement element, local law-enforcement, and federal agencies. The CONUS installation will obtain threat-specific information from the FBI.

2. MISSION/PURPOSE:

Provide a clear, concise statement of the command's mission and the AT purpose or goal statement supporting the mission. The primary purpose of the installation's AT plan is to safeguard personnel, property, and resources during normal operations. It is also designed to deter a terrorist threat, enhance security and AT awareness, and assign AT responsibilities for all installation personnel. DODD 2000.12 states that it is "DOD policy to protect DOD personnel and their families, facilities, and other materiel resources from terrorist acts." In meeting this goal, the installation should meet the following four objectives:

a. Deter terrorist incidents: Installation commanders will dissuade terrorists from targeting, planning against, or attacking the US's DOD assets by communicating the US's intent and resolve to defeat terrorism.

b. Employ countermeasures: Installation commanders will employ the appropriate mix of countermeasures, both active and passive, to prevent terrorists from attacking the US's DOD assets.

c. Mitigate the effects of a terrorist WMD incident: Installation commanders will employ the full range of active and passive measures to lessen the impact of terrorist events against the US's DOD assets.

Figure F-2. AT Planning Considerations (OPLAN Format)
(Continued)

d. Recover From a Terrorist WMD Incident: Installation commanders will design plans to recover from the effects of a terrorist incident.

NOTE: This focus will be on the installation's required, immediate response to a WMD threat or incident; the first responders' specific actions to make an appropriate assessment of the situation suspected as being an NBC incident; and follow-on forces' actions.

3. EXECUTION:

a. Commander's Intent: Designate how the commander envisions the development and implementation of the AT Preincident and Postincident Plan and the establishment of the overall command priorities. Provide subordinates sufficient guidance to act upon if contact or communications with the installation's chain of command is lost or disrupted.

b. Concept of Operations: Designate how the overall AT operations should progress. The plan stresses deterrence of terrorist incidents through preventive and response measures to all combatant commands and services.

During day-to-day operations, the installation should stress continuous AT planning and passive, defensive operations. This paragraph should provide subordinates sufficient guidance to act upon if contact or communications with the installation's chain of command is lost or disrupted. The installation's AT CONOPS should be phased in relation to preincident and postincident actions. AT planning and execution requires that staff elements work with a much greater degree of cohesiveness and unit of mission than that required during the conduct of normal base-sustainment operations. The AT mission, and the unpredictability of its execution, requires very specific "how to" implementation instructions of DOD THREATCON measures and in what manner these actions must be coordinated. This "how to" element is not normally included in the CONOPS paragraph; however, the necessity to provide "how to" guidance in the AT plan requires a different manner of data presentation to ensure brevity and clarity. The implementation instructions are put into the form of action sets and displayed in the form of an execution matrix (Preincident Action Set Matrix). It is recommended that this subparagraph be in the execution-matrix format, as it best captures the complex data required to execute the AT plan.

In Postincident planning, the installation should focus on its responsibilities during the first 4 hours upon notification of a terrorist incident and the procedures for obtaining technical assistance/augmentation if the incident exceeds the installation's organic capabilities. National-level responders, FEMA, the Red Cross, and the FBI may not be immediately accessible or available to respond to an installation's needs. Therefore, each installation must plan for the worst-case scenario by planning its response based on its organic resources and available local support through MOAs and MOUs. The situation may dictate that the installation not only conduct the initial response but also sustained response operations. Many installations do not have WMD officers or specialized response elements.

Figure F-2. AT Planning Considerations (OPLAN Format)
(Continued)

Therefore, this template provides generic guidance and instructions so that installations can address each element by assigning the appropriately trained individual(s), regardless of duty title/job description. This paragraph will include specific implementation instructions for all functional areas of responsibility and the manner in which these actions must be coordinated. The implementation instructions will be put in the form of actions sets and displayed in the form of a synchronization matrix (Postincident Action Set Synchronization Matrix). The synchronization matrix format clearly describes relationships between activities, units, supporting functions, and key events that must be carefully synchronized to minimize the loss of life and to contain the effects of a terrorist incident. The planning steps are as follows:

(1) Step One, Risk Assessment and Risk Management.

- Conduct a threat assessment and define the threat.
- Conduct a criticality/vulnerability (C/V) assessment.
- Conduct an AT planning and response-element assessment.
- Develop a C/V Graph.
- Develop an AT planning and response element effectiveness graph.

(2) Step Two, Build Action Set Matrix and Synchronization Matrix.

- Establish a baseline for THREATCON normal; use “outside-in” approach.
- Develop the preincident action set matrix.
- Develop the postincident synchronization matrix.

(3) Step Three, Write the Plan.

c. Tasks and Responsibilities of Key Elements: Designate the specific tasks for each subordinate unit. Key members of the installation have responsibilities that are AT and/or WMD specific. The commander should ensure that a specific individual, unit, or element within the installation is responsible for each action identified in this plan. Each individual, unit, and element must know the tasks and responsibilities, what the responsibilities entail, and how these will be implemented. While the tasks and responsibilities for each AT planning and response element will be delineated in the preincident and postincident action set matrices, it is recommended that the installation commander identify or designate the primary lead for each element and enter that information in this paragraph.

d. Jurisdiction: Designate the jurisdictional limits of the installation’s commander and key staff. Although the DOJ has primary law-enforcement responsibility for terrorist incidents in the US, the installation commander is responsible for maintaining law and order on the installation. For OCONUS incidents, the installation commander must notify the HN and the geographic combatant commander; the geographic combatant commander will

Figure F-2. AT Planning Considerations (OPLAN Format)
(Continued)

notify the DOS. Once a TF (other than installation support) arrives on the installation, the agencies fall under the direct supervision of the local incident commander.

In all cases, command of military elements remains within military channels. The installation should establish HN agreements to address the use of installation security forces, other military forces, and HN resources that clearly delineate jurisdictional limits. The agreements will likely evolve into the installation having responsibility "inside the wire or installation perimeter" and the HN having responsibility "outside the wire or installation perimeter." There may be exceptions due to the wide dispersal of work and housing areas, utilities, and other installation support mechanisms, which may require the installation to be responsible for certain areas outside of the installation perimeter.

e. Coordinating Instructions: This paragraph should include AT-specific coordinating instructions and subparagraphs as the commander deems appropriate. In addition, this section of the AT plan outlines aspects of the installation's AT posture that require particular attention to guarantee the most effective and efficient implementation of the AT plan. For the purposes of this plan, there are five types of coordinating instructions: AT planning and response elements, procedural, security-posture responsibilities, threat-specific responsibilities, and special installation areas. The sections listed below are representative and may not be all-inclusive.

(1) AT Planning and Response Elements: For instructional purposes, this template outlines AT planning and response elements on the installation that are required to respond to a terrorist/WMD incident. Initial and sustained responses to an attack must be a coordinated effort between the many AT planning and response elements of the installation, based on the installation's organic capabilities. As the situation exceeds the installation's capabilities, it must activate MOAs/MOUs with the local, state, and federal agencies (CONUS) or the HN (OCONUS). For the purposes of this plan, an installation's capability is divided into AT planning and response elements. These tailored, installation-level elements parallel necessary national-level FEMA's ESFs and the joint-service evaluation criteria to the greatest degree possible.

AT Planning and Response Elements

(a)	Information and Planning	*	
(b)	Communications	*	+
(c)	HAZMAT	*	
(d)	Security	*	+
(e)	Fire Fighting	*	+
(f)	Health and Medical Services	*	+
(g)	Resource Support	*	
(h)	Mass Care	*	
(i)	Public Works	*	
(j)	Intelligence Process		+
(k)	Installation's AT Plans/Programs		+
(l)	Installation's Perimeter Access		+

Figure F-2. AT Planning Considerations (OPLAN Format) (Continued)

(m) Security-System Technology +
(n) Executive Protection +
(o) Response and Recovery +
(p) Mail Handling +

* Derived from FEMA's ESFs
\+ Derived from joint services' vulnerability-assessment criteria

(2) Procedural:

a. Alert Notification Procedures: According to CJCSM 3150.03, the installation will submit an operations report (OPREP)-3 in the event of a terrorist WMD incident, directly to the NMCC. The goal is to make initial voice reports within 15 minutes of an incident, with message reports submitted within 1 hour of the incident. The initial report must not be delayed to gain additional information. Follow-up reports can be submitted as additional information becomes available. The installation will submit voice reports sequentially to the NMCC, appropriate CINCs, and the reporting unit's parent service and intermediate superior command. Conference calls or concurrent telephone calls should be considered if no delays are encountered and security can be maintained. There will remain an open line between the NMCC and the installation throughout the duration of the incident. NMCC telephone numbers are: DSN Primary: 851-3840; DSN Secondary: 725-3530; DSN Tertiary: 227-6340; Commercial: 703-521-1014; Washington Switch: 703-697-1201; Drop: DSN 312-1048/1049/1050/1051. All OPREP-3 will be submitted as soon as possible after an event or incident has occurred and sent at FLASH or IMMEDIATE precedence. Message Address: JOINT STAFF WASHINGTON DC//J3 NMCC//. (Designate the person, staff, or unit responsible for establishing the proper notification systems and procedures. Enter a description of the alert-notification procedures here. Include alert rosters for all units and organizations on the installation.)

NOTE: Establish procedures for notifying the appropriate staff elements, the crisis-management team, responding forces, the installation's units, service personnel, and other installation occupants of an impending or actual situation.

b. ROE for the Application of Force: Designate the standing operating procedures for the use of deadly force. (This may include information on the minimum standards for weapons qualification before issuing of a weapon.)

NOTE: Establish the procedures for the use of force and educate and train on-site security elements and the auxiliary force in these procedures. When force is used, apply only the minimum force necessary to effectively control the situation. Applying force in degrees ensures that deadly force will not be used inadvertently. Ensure that

Figure F-2. AT Planning Considerations (OPLAN Format)
(Continued)

installation personnel are aware of the degrees of force and who authorizes the application thereof.

c. Installation's AT Exercise: Designate the appropriate methods and frequency to exercise the AT plan.

d. Incident Response: Designate the several plans that will be activated upon initiation of the incident (assassination, assault, hostage and barricade, hijacking, kidnapping, bombing, civil disorder, WMD, and information operations).

NOTE: Each case may require a different series of forces to successfully respond to and conclude the incident. Establish mechanisms to respond to a variety of terrorist incidents and integrate them into the installation's AT plan. Describe the interaction with local authorities that use MOAs and MOUs.

e. Consequence Management: Designate information on how the installation will handle the consequences of a terrorist incident. This section does not apply to WMD, but to other terrorist incidents. This section should include references to coordination with the PAO, medical personnel, and mortuary affairs. Describe the interaction with local authorities that use MOAs and MOUs.

f. Executive or Distinguished-Visitor Protection Procedures: Designate the person or staff with overall responsibility for protection procedures. This person or staff will identify the forces available for executive or distinguished-visitor protection. This plan should facilitate the coordination with the visitor's security office or protection and security detail.

(3) Security Posture Responsibilities:

a. Operations Security (OPSEC): Designate the person, staff element, or unit responsible for the installation's OPSEC. This person, staff element, or unit should produce the C/V reports. The commander will use these reports to enhance the installation's AT posture, design countermeasures, and facilitates incident response and postincident planning.

b. Access Controls: Designate the person(s), staff(s), or unit(s) responsible for pedestrian, vehicular, and package and mail access onto the installation. Describe the installation's access control system.

NOTE: An installation's access control system may include several discrete systems (i.e., perimeter, key facilities, secret compartmented information facilities [SCIFs]). Coordinate all elements in the access control plan with other security measures.

c. Barriers: Designate the person, staff, or unit responsible for planning barriers for the installation's AT plan.

d. Lighting: Designate the person, staff, or unit responsible for the lighting plan.

Figure F-2. AT Planning Considerations (OPLAN Format)
(Continued)

e. On-Site Security Elements: Designate the person or staff with overall responsibility for installation security. List the military and civilian security force that is specifically organized, trained, and equipped to provide the physical security and law enforcement for the command.

f. Technology: Designate the person, staff, or unit to identify emerging technologies, which could enhance the overall protection of the installation.

NOTE: Emerging technologies are particularly important to the terrorist WMD threat (e.g., responder equipment, detection equipment, plume plotting, etc.)

g. Security Training: Designate the person, staff, or unit responsible for the preparation and execution of individual security training. Establish an effective security education and training program for the entire installation (which includes the required actions to different threat alarms and specific training for civilian personnel, contractors, family members, and tenant units.

(4) Threat-Specific Responsibilities:

a. Weapons of Mass Destruction: The threat of a terrorist attack poses different and, in some cases, more difficult challenges. Designate a special task-organized staff or unit to plan for a WMD attack against the installation. Ensure that the proper response equipment is on-hand.

NOTE: The responsible staff or unit should build the WMD plan with checklists and develop tools appropriate to the installation.

b. Information Operations: Terrorists may choose to strike at an informational source to terrorize an installation or DOD asset. Designate the person, staff, or unit responsible for information operations.

NOTE: The responsible planner should develop a plan for the safeguarding of information and integrate this plan into the overall AT plan.

(5) Special Installation Areas:

a. Airfield Security: Designate the person, staff, or unit responsible for airfield security. Enter the airfield security plan here (or include as an annex) as part of the overall AT plan.

b. Port Security: Designate the person, staff, or unit responsible for port security. Describe the port security plan here (or include as an annex) as part of the overall AT plan.

Figure F-2. AT Planning Considerations (OPLAN Format)
(Continued)

c. Buildings: Designate the person, staff, or unit to review each building on the installation according to the installation's C/V assessments.

NOTE: The responsible person, staff, or unit should develop a plan, series of checklists, or other tools to bring the installation to a level of AT protection consistent with the installation's THREATCON.

4. LOGISTICS AND ADMINISTRATION:

Designate the logistics and administrative requirements to support the AT plan, which should include enough information to make clear the basic concept for planned logistics support. Ensure that the staff conducts logistical planning for both preincident and postincident activities The staff should address the following: locations of consolidated WMD defense equipment, expedient decontamination supplies, IPE exchange points, special contamination-control requirements, retrograde contamination monitoring sites, WMD equipment/supplies controlled supply rates and prestockage points, and procedures for chemical-defense equipment "push" packages. Specific logistics and administrative requirements will emerge throughout the planning process outlined in the CONOPS, specifically when developing the action sets. These requirements should be incorporated into this paragraph.

- **Readiness and Concept of Combat Service Support:** Designate service-support instructions and arrangements pertinent to the AT plan. If the arrangements are lengthy, include in an annex or separate administrative and logistics order. When planning for a postincident response, include ways to cope with decontamination of equipment; clothing exchange and showers; equipment recovery and evacuation; mortuary-affairs policy, standards, and procedures; contaminated remains; and emergency destruction of munitions.

NOTE: Organizations tasked throughout this plan to provide logistics support during an increased THREATCON should ensure that they constantly maintain the capability to do so. In the event that any specific requirement cannot be met for any reason, the unit commander responsible for the activity in question must notify the AT planner to reallocate resources.

- **Material and Services:** Designate supply, maintenance, transportation, construction, and allocation of labor that apply to AT efforts before a terrorist incident. Establish mission essential equipment requirements for a WMD defense. Determine the types and quantities of supplies and equipment needed to support the plan (decontamination, individual protection, collective protection, and communications). Determine the requirements of what to issue, to whom, and when and the training required when issued.

- **Weapons and Ammunition:** Designate the weapons and basic ammunition allowances required to support the AT augmented security forces.

Figure F-2. AT Planning Considerations (OPLAN Format)
(Continued)

NOTE: Planners should identify the location, authority for, and basic level of issue. Planners should determine whether a predetermined allocation of ammunition exits, where the allocation of ammunition is stored, who has access to the ammunition, and whether the AT package contains explosives.

- **Medical Services:** Designate plans, policies, and local/HN agreements for AT and WMD treatment, hospitalization, and evacuation of personnel, both military and civilian. Planners should include aerial medical-evacuation support, the nearest trauma center, the ability to set up a crisis center, response capabilities for NBC and radiological agents, contamination and decontamination assurance, and the ability to support a mobile medical hospital. Installation planner should ensure that all medical personnel are properly trained and maintain a high state of readiness.

- **Personnel:** Designate procedures for strength reporting and replacements and other procedures pertinent to base defense, including handling civilians. Enter specific procedures for processing casualties; include coordination with medical services for documentation and installation procedures for notification of next of kin.

- **Civil Affairs:** Designate the person, staff, or unit responsible for coordinating and interfacing with the local population to provide assistance for civilian needs in the event of casualties.

NOTE: Planners should also develop community relations to support the installation's needs or requirements during a time of crisis.

- **Updates to the Installation's AT Plan:** Designate the appropriate person, staff, or unit responsible for developing a process for updating the installation's AT plan (derived from this template) and for the distribution of those updates.

5. COMMAND AND SIGNAL:

Enter instructions for command and operation of communications-electronics equipment. Identify the primary and alternate locations of the CP and EOC. Enter the installation's chain of command. Highlight any deviation from that chain of command which must occur as a result of a WMD incident. The chain of command may change based on the deployment of a JTF or an NCA-directed mission. Identify the location of NBC staffs or any technical support elements that could be called upon in the event of a terrorist WMD incident and the means to contact each. The installation must provide for prompt dissemination of notifications and alarm signals and the timely and orderly transmission and receipt of messages between elements involved in and responding to the incident.

Figure F-2. AT Planning Considerations (OPLAN Format)
(Continued)

a. Command: Designate command relationships to include command succession.

NOTE: The installation commander must ensure that the key AT staff members understand the differences inherent to the installation's incident response command structure, with special considerations to the location of the installation (CONUS/OCONUS). Whether these operations occur in CONUS or OCONUS, the relationships should be represented in the plan to reflect the agreements between the supporting government agencies or the HN. These relationships may be presented in a chart as an annex to the plan. This is an excellent tool to formulate the alert-notification procedures to be placed in the front of the AT plan and paragraph 3c. Also note that the command, control, and reporting responsibilities for foreign terrorist attacks on DOD property or personnel belong to the geographic combatant commander within whose area of responsibility (AOR) the attack has occurred. The functional combatant commander with assets under his control will coordinate with the affected geographic combatant commander for an appropriate division of responsibilities. The installation commander should ensure that proper reporting procedures are in place with the higher HQ.

b. Signal: Communications for AT contingency operations will be the normal base communications augmented by portable radio, landlines, courier, and runners and will be according to OPSEC and communications security (COMSEC) requirements. Ensure that communications are compatible between the installation responders and local community responders. Designate information on the requirements for additional equipment (computers and hand-held radios), its type, and its dissemination; pertinent communications nets; operating frequencies; codes and code words; recognition and identification procedures; type of alarms and required responses; and electronic emission constraints.

Figure F-2. AT Planning Considerations (OPLAN Format)
(Continued)

Appendix G

RESPONSE TO TOXIC INDUSTRIAL MATERIALS EVENTS

1. Background

The information in this appendix provides general protective guidance for response to a TIM incident. This appendix provides information on selected TIM information resources, the general means of determining protective-action zones (PAZs), actions that can be undertaken to conduct vulnerability mitigation, and generic precautions.

a. TIM are almost universal in their distribution and are available in amounts that dwarf the amounts of CW agents ever produced. Industrial materials include chlorine, ammonia, solvents, and pesticides, fertilizers, and petrochemicals and are extensively used in the manufacture of plastics. TIM are used within industrial plants, sold and transported to other plants, and distributed through commercial and retail outlets. TIM can be found in almost every town, city, or country in the world, whether in a chemical industry, a warehouse, a rail yard, or an agricultural supply company.

b. The American Chemical Manufacturers Association (CMA) estimates that over 25,000 commercial facilities worldwide produce, process, or stockpile chemicals that fall within the purview of the Chemical Weapons Convention. These include dual-use chemicals, which can be used both for legitimate industrial purposes and as CW agents. Each year, more than 70,000 different chemicals amounting to billions of tons of material are produced, processed, or consumed by the global chemical industry. Many of these chemicals may be sufficiently hazardous to be a threat, either by deliberate or accidental release. The release of large volumes of hazardous chemicals (HAZCHEMs) can produce environmental damage that could result in pollution of water supplies and long-term ecological damage.

c. Beyond their toxicity, TIM can have other significant hazards. Industrial chemicals are often corrosive and can damage the eyes, skin, respiratory tract, and equipment (especially electronic equipment). Many industrial materials are flammable, explosive, or react violently with air or water. These hazards can be greater than the immediate toxic effects from an industrial chemical release. Most industrial chemicals can have both short-term and long-term health effects, ranging from short-term transient effects to long-term disability, to rapid death.

d. Military protection and detection and medical countermeasures are not specifically designed for the hazards from TIM. Often there are no specific antidotes for TIC.

e. Although the hazards of weaponized chemicals have long been recognized, the hazards of industrial materials have only recently become more widely understood. Deliberate or inadvertent release of TIM significantly increases hazards to the indigenous population and US forces. While CW agents are highly toxic and lethal in small amounts, the countries producing them are generally known and are few in numbers when compared with the quantities and universal nature of TIM. TIM should be recognized for the multiple

health hazards they pose as well as the potential risks resulting from an explosion or fire-associated products. Most TIM will present a vapor (inhalation) hazard. Vapor concentration at or near the point of release may be very high and may reduce the oxygen concentration below that required to support life. These TIM are generally in one of the following categories.

- Agricultural. Includes insecticides, herbicides, and fertilizers.

- Industrial. Chemical and radiological materials used in manufacturing processes or for cleaning.

- Production and Research. Chemical or biological materials produced or stored in a facility.

- Radiological. Nuclear power plants, medical facilities/laboratories, uranium mining and refining operations, nuclear-fuel fabrication, and radiological-waste storage operations.

2. TIM-Operations Planning

Before any operation, the response element develops an understanding of the potential hazard from TIM in the area of concern. Furthermore, information collection requirements that can support vulnerability analysis and assessment during the planning process (deliberate or crisis action) include some of the following key factors:

a. Identifying all possible industrial plants, storage sites, and shipment depots.

b. Identifying TIM routinely produced, used, or processed in the area. Knowledge of the manufacturing process used at an industrial plant is especially important as TIM are often used as intermediates in the productions of plastics, pesticides, and herbicides.

c. Assessing the effects of the release of TIM either as a result of collateral damage or an accident.

d. Assessing whether the deliberate release of a TIM is realistic in this particular situation. Factors that should be considered in this assessment are as follows:

- Favorable terrain and meteorological conditions.

- Political environment (serves as a bargaining chip).

- Insignificant punishment or retaliation policy in place.

- Military advantage or benefit to be gained.

- Psychological impact.

e. Identifying local hazard-management procedures and civilian agencies responsible for handling HAZMAT incidents. These contacts should be noted for quick reference.

f. Identifying local hazard identification labeling and placarding systems. A reference sheet listing local names for high-hazard industrial chemicals should be developed for use in the field.

g. Assessing the need for special detectors and modifications of detectors, such as CAMs.

h. Assessing the need for specialized protection equipment, such as the SCBA or special chemical suits.

i. Assessing potential information items for the commander. These items include the following:

- How does one determine if there is a potential threat?
- Is there a special way one needs to react to these chemicals that is different from the way he has been trained?
- Where is it safe to be?
- How much exposure is safe?
- What decontamination equipment can be used or is needed?
- What are the short-term and long-term health effects?
- What are the effects on noncombatants?
- What are the effects on military equipment?

3. TIM Information-Management Resources

a. The US DOT Emergency Response Guidebook lists HAZMATs commonly shipped in the US. This publication is a guide for first responders during the initial phase of a HAZMAT incident. It highlights especially hazardous materials and provides an index of protective actions to take and a table of initial isolation and protective-action distances.

b. The NIOSH Pocket Guide to Chemical Hazards provides reference information in a table format, which can be used for hazard assessment and management. The information includes chemical names, synonyms, trade names, exposure limits, physical and chemical properties, chemical incompatibilities and reactivities, personal protection measures, and health hazards.

4. Protective-Action-Zones Determination

Plans supporting PAZs for each hazard site and immediate evacuation from the hazard's path are the best defense against the TIM hazard. As a minimum, commanders should consult with the engineer officer, NBC defense officer, legal officer, medical officer, intelligence officer, PM, and PAO when planning PAZs. These staff officers can provide guidance for hazard isolation, entry denial, evacuation, and in-place protection.

a. Isolate Hazard Area/Deny Entry. Isolating the hazard area establishes control and is the first step for protective actions that follow. Exclude personnel not directly involved in responding to the hazard, especially responding personnel that are not adequately protected. The initial isolation zone will include upwind distances from the incident that may contain dangerous concentrations.

b. Evacuate/Shelter in Place. When the time and mission allow, evacuation is the best protective response to a TIM hazard. Evacuate personnel closest to the hazard and outdoors (those in direct view of the scene first). The use of PAZ estimates assume that random wind-direction changes confine the hazard-vapor plume to an area within 30 degrees on either side of the predominant wind direction, resulting in a crosswind protective-action distance equal to the downwind protective-action distance. Evacuation measures must also consider that water-reactive poison inhalation hazards (PIH) making their way into streams will move with the current and stretch the hazard substantial distances from the hazard point.

Table G-1. Example of a Hazard Response Guide (Mixed Load/Unidentified Cargo)

POTENTIAL HAZARD

FIRE OR EXPLOSION

- Substance may explode from heat, shock, friction, or contamination.
- Substance may be ignited by heat, sparks, or flames.
- Vapors may travel to the source of ignition and flash back.
- Containers may explode when heated.

HEALTH

- Inhalation of, ingestion of, or contact with the substance may cause severe injury, irritation, disease, or death.
- High concentrations of gas may cause asphyxiation without warning.
- Contact with the substance may cause burns to the skin and eyes.
- Runoff from fire control may cause pollution.

PUBLIC SAFETY

PROTECTIVE CLOTHING

- Positive pressure SCBA should be worn.
- Structural firefighters' protective clothing will only provide limited protection.

EVACUATION

—

- If a tank, rail car, or tank truck is involved in a fire, ISOLATE the surrounding area for 800 meters. Also, consider the initial evacuation of persons in the surrounding areas for 900 meters.

EMERGENCY RESPONSE

FIRE

- **CAUTION: Material may react with extinguishing agent.**

- **Small Fires**
  - Use dry chemical (CO_2) and spray with water or use regular foam.
- **Large Fires**
  - Spray with water or use fog or regular foam.
  - Move the containers from the fire area if it can be done without risk.
- **Fire Involving Tanks**
  - Cool containers with flooding quantities of water until well after the fire is out.
  - Do not get water inside the containers.
  - Withdraw immediately in case of a rising sound from venting safety devices or discoloration of the tank.
  - ALWAYS stay away from the ends of the tanks.

FIRST AID

- Move the victim to fresh air.
- Call emergency medical care.
- Apply artificial respiration if the victim is not breathing.
- Do not use the mouth-to-mouth method if victim ingested or inhaled the substances; use other approved respiration devices equipped with a one-way valve.
- Remove and isolate contaminated clothing.
- Administer oxygen if breathing is difficult.
- Shower and wash with soap and water.
- Note that the effects of exposure (inhalation, ingestion, or skin contact) may be delayed.
- Ensure that medical personnel are aware of the material(s) involved and that they take precautions to protect themselves.

(1) When evacuating the hazard area, individuals should wear clothing that prevents deposition of liquid on and minimizes injury to exposed skin.

(2) Do not permit evacuees to congregate at established safe distances. Evacuation to established safe distance does not guarantee complete safety for evacuated personnel. When possible, move evacuated personnel to a designated location by a specific route, and to a distance where additional movement is not required following a radical wind shift.

(3) Use in-place protection when evacuation may cause greater risk than remaining in place. In-place protection may not be an option if the TIM vapors are flammable, the hazard is persistent, or buildings cannot be closed tightly. Warn persons that are protected in place to stay clear of windows due to the danger from glass and projectiles in the event of a fire and explosion.

(4) Maintain communications with in-place protected personnel to advise them of changing conditions. Communications is a psychological lifeline for personnel cutoff from freedom of movement and information.

5. Vulnerability Mitigation

Selected measures that support vulnerability mitigation include securing key information, assessing vulnerability, conducting detection, and taking protective measures.

a. Securing Key Information. Each TIM incident has special problems and considerations. During planning, attempt to secure pertinent information involving production, storage facilities, distribution, and transportation of TIM. As a minimum, obtain the type, quantity, and specific risk from fire, explosion, toxicity, corrosive effects, and/or persistency of gas. Sources for this information include appropriate scientific or civilian industrial personnel, CW treaty experts, safety reports, and materiel safety data sheets (MSDS) on the facility, international code markings on storage tanks, and local civilian authorities that have emergency-response procedures and resources.

b. Assessing Vulnerability.

(1) A thorough vulnerability analysis provides an initial estimate of the threat and is the first step toward mitigating the operational effects of damage or destruction of a TIM facility. Determining the TIM hazard or threat and possible countermeasures in the area of operations is a primary responsibility of the medical and supporting PVNTMED staff. They are supported by the NBC and civil-affairs staffs. Before entry into the area, area assessment teams provide information involving TIM hazard production, storage facilities, and suspected hazard areas.

(2) Military protection and decontamination equipment was not designed for handling TICs. For proper handling, protection, and hazard-management information, responders seek guidance from their C^2 element. Other sources for assistance include the Chemical Transportation Emergency Center (CHEMTREC) hot line, for emergency

assistance within the US/Canada: 1-800-424-9300 or outside CONUS: 1-202-483-7617 (toll free if necessary). Commanders also identify the local civilian authorities that may have additional emergency-response procedures and resources, which can be used.

c. Conducting Detection. Some plants, facilities, storage containers, or transport containers may be identified by markers. These could take the form of international HAZCHEM markers that are diamond shaped and contain information that can be used to identify the exact industrial chemical. When encountering a suspect industrial chemical, attempt to identify the exact TIM and all possible information on the materials.

(1) Additionally, standard in-service chemical detectors are designed only to detect CW gases. Detection of TIC can, in some circumstances, be made by in-service military chemical-detection systems.

(2) Several industrial detection systems are available for the rapid detection of specific industrial chemicals, such as chlorine or ammonia. Detection systems, such as the Dräger detector system, can be used for detecting and determining the concentration of a large number of dangerous chemicals. This system comes in the form of a simple kit, which uses individual tubes to detect a variety for specific industrial chemicals. Such systems can be supplied to units operating in an area where there is a known hazard from industrial chemicals.

d. Taking Protective Measures. For fire fighting, the SCBA must be used when entering any enclosed space where there has been a TIM spill or to perform clean-up work. The individual protective mask (NBC mask) does not afford sufficient protection within the immediate hazard zone where extremely high concentrations of industrial chemicals such as ammonia may occur and where the lack of oxygen requires the use of the SCBA. The military respirator should only be used for emergency protection against the immediate effects of a toxic release and while evacuating from the immediate hazard zone. Further, military chemical protective suits (MOPP gear) are not designed for providing protection against TIC.

6. TIM Precautions

a. Personnel or equipment that may have been contaminated with TIC can be decontaminated by washing with large amounts of warm, soapy water. Contaminated clothing should be immediately removed and disposed of in a safe manner; however, when no release has occurred, establish a minimum safety EZ based upon mission requirements, surveys, and assessments of the TIM facility.

b. If a TIM release occurs, evacuate beyond the safety EZ established by the incident or on-site commander. When mission requirements dictate entering the EZ for unknown TIMs, personnel should wear, at minimum, a positive pressure SCBA (pressure demand), a fully encapsulated (Level A) chemical-resistant suit, chemical-resistant inner gloves, chemical-resistant outer gloves, two-way radio communications, and other recommended safety equipment, as appropriate.

NOTE: MOPP gear does not equal a fully encapsulated chemical-resistant suit.

c. Reduce safety exclusion areas only after a detailed survey and assessment of the extent of the probable hazard area. When friendly units are required to operate in an area where a potential TIM facility exists, defense planning should include actions such as the following:

- Coordinate with civil HN emergency-response teams.

- Identify the probable TIM, extent of possible contamination, minimum protective equipment, and personnel safety considerations.

- Coordinate with higher HQ and the HN to identify support availability.

- Develop an incident response plan. For detailed information and procedures for response plans, refer to service-specific publications that provide templates for plan development (i.e., Air Force Instruction [AFI] 32-4001, Air Force Manual [AFM] 32-4004, and AFM 32-4013).

- Implement the TIM reconnaissance plan and assign units to prepare and execute the recon missions.

- Use commercial detectors (i.e., Dräger tubes), which can provide confirmation of individual TIM. However, chemical reactions and combustion by-products may produce toxic products that are not identified by these detectors.

- Coordinate with theater medical elements (e.g., PVNTMED team) for follow-on industrial hygiene assessments, as dictated by mission requirements.

- Coordinate with in-theater TEU elements for follow-on technical support if appropriate.

- Coordinate with engineer elements if the facility in question was damaged or destroyed or if assessments indicate it is abandoned.

- Coordinate with decontamination elements for decontamination of contaminated personnel and equipment.

- Coordinate for delivery of collected samples to the in-theater supporting medical laboratory.

- Avoid hazard areas as long as possible. When conducting reconnaissance or rescue operations near or within the hazard, equip ground survey teams with respiratory protection (i.e., SCBA) and skin protection certified for the TIM. Use aerial, visual reconnaissance to help collect C^2 information to assist with incident management.

NOTE: See FM 8-500 for first-responder guidance to a TIM incident.

7. Risk-Management Summary

a. Exposure Guidance. Exposures exceeding the permissible exposure limits and published exposure levels immediately dangerous to life and health (IDLH) mandate PPE commensurate with the hazard.

b. Potential Skin Absorption and Irritation Sources. Evaluate the hazard for water and air reactivity; explosive, combustible, or other mixture hazards; and toxicity hazards. Mark and template potential hazard zones, and plan and institute protective measures.

c. Potential Eye Irritation Sources. Provide individual protective equipment or other protective measures to keep individual exposure within the prescribed safe limits.

d. Oxygen Deficiency. Evaluate hazards that might cause decreases in the oxygen level and install warning devices that alert to oxygen-deficient levels.

Appendix H

FEDERAL RESPONSE PLAN FOR A TERRORISM INCIDENT RESPONSE

NOTE: The information in this appendix is a summary from the FRP's Terrorism Incident Annex.

1. Background

a. In June 1995, the White House issued PDD-39. PDD-39 directs a number of measures to reduce the nation's vulnerability to terrorism, to deter and respond to terrorist acts, and to strengthen capabilities to prevent and manage the consequences of terrorist use of WMD. PDD-39 states that the US will have the ability to respond rapidly and decisively to terrorism directed against Americans wherever it occurs, arrest or defeat the perpetrators using all appropriate instruments against the sponsoring organizations and governments, and provide recovery relief to victims, as permitted by law.

b. Crisis management and CM are discussed in PDD-39. Crisis management includes measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or an act of terrorism. The laws of the US assign primary authority to the federal government to prevent and respond to acts of terrorism; state and local governments provide assistance as required. Crisis management is predominantly a law-enforcement response. Based on the situation, a federal crisis-management response may be supported by technical operations, and by federal CM, which may operate concurrently (see Figure H-1). Technical operations include actions to identify, assess, dismantle, transfer, dispose of, or decontaminate personnel and property exposed to explosive ordnance or WMD.

c. CM includes measures to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism. The laws of the US assign primary authority to the states to respond to the consequences of terrorism, and the federal government provides assistance as required.

(1) Purpose. The purpose of the FRP's Terrorism Incident Annex, hereafter referred to as the annex, is to describe the federal CONOPS to implement PDD-39, when necessary, and to respond to terrorist incidents within the US. The annex—

- Describes crisis management. Guidance is provided in other federal plans.

- Defines the policies and structures to coordinate crisis management with CM.

- Defines CM, which uses FRP structures (supplemented as necessary, by structures that are normally activated through other federal plans).

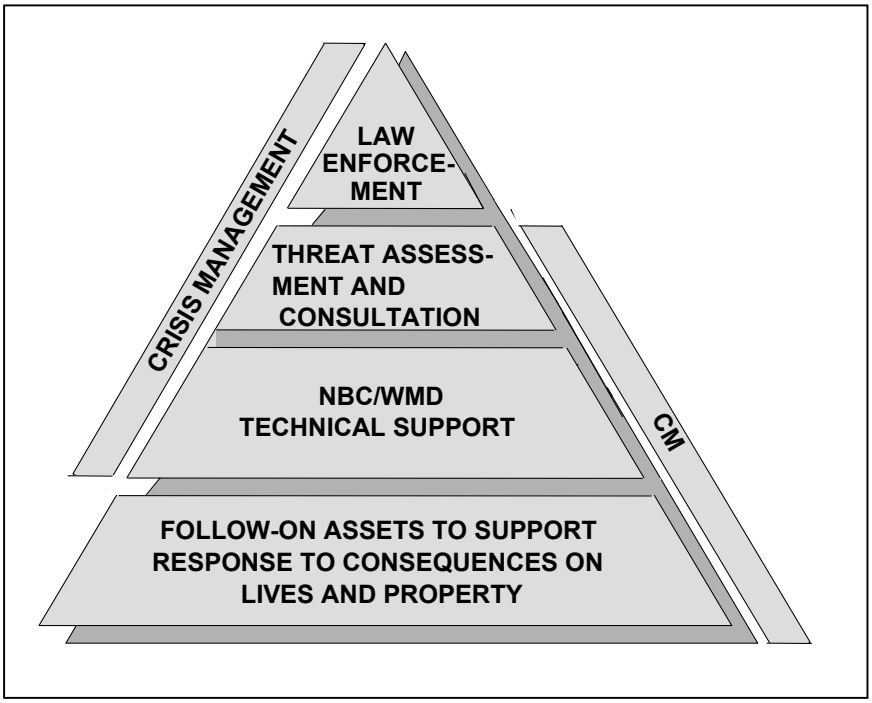

Figure H-1. Relationship Between Crisis Management and CM

(2) Scope.

- The annex applies to all threats or acts of terrorism within the US requiring a federal response as determined by the White House.

- The annex applies to all federal departments and agencies that may be directed to respond to a threat or an act of terrorism within the US.

- The annex builds upon FRP concepts and procedures by addressing unique policies, assumptions, structures, responsibilities, and actions that will be applied for CM as necessary.

2. Policies

a. Lead-Agency Responsibilities. PDD-39 validates and reaffirms existing federal lead agency (FLA) responsibilities for counterterrorism, which are assigned to the DOJ (as delegated to the FBI) for threats or acts of terrorism within the US. The FBI operates as a on-scene manager. It is the FBI's policy that crisis management will involve only those federal agencies that it requests to provide expert guidance and/or assistance, as described in the PDD-39's Domestic Guidelines (Classified) and the FBI's Incident Contingency Plans (CONPLAN's). Unclassified versions of the PDD-39's Domestic Guidelines and the FBI's Incident CONPLANs are incorporated into this appendix.

b. Consequence Management. PDD-39 states that FEMA shall ensure that the FRP is adequate to respond to the consequences of terrorism. FEMA, with the support of all agencies in the FRP, shall act in support of the FBI in Washington, District of Columbia, and on the scene of the crisis, until such time as the Attorney General shall transfer the lead-agency role to FEMA (see Figure H-2). FEMA retains responsibility for CM throughout the federal response and acts in support of the FBI (as appropriate), until the Attorney General, in consultation with the FBI Director and the FEMA Director, determines that such support is no longer required. It is FEMA's policy to use FRP structures to coordinate all federal assistance to state and local governments for CM.

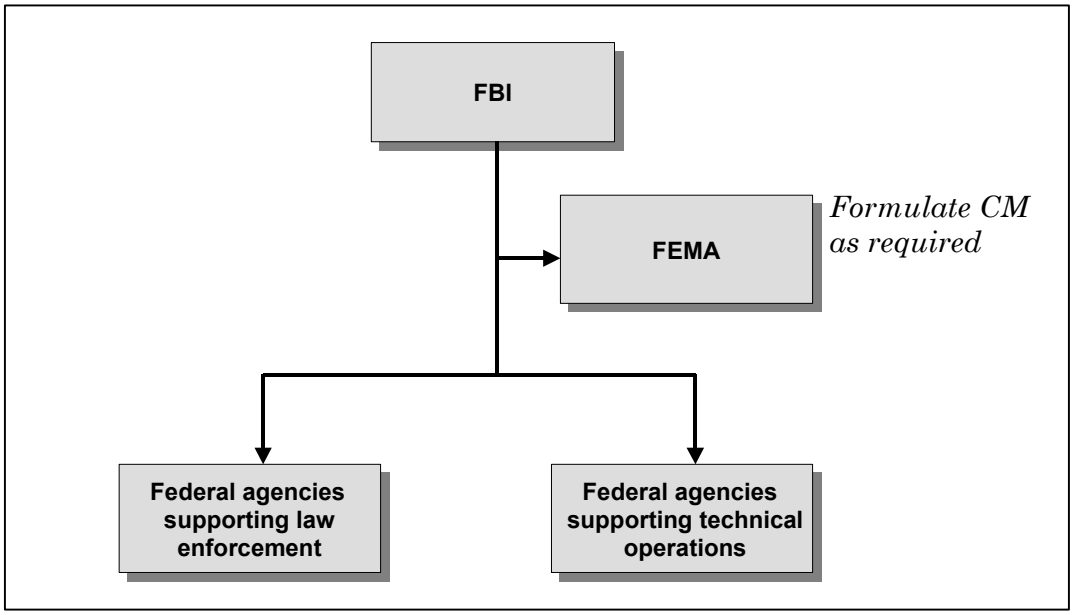

Figure H-2. Relationship Among Federal Agencies Under PDD-39

c. Costs. PDD-39 states that federal agencies directed to participate in the resolution of terrorist incidents or conduct counterterrorist operations shall bear the costs of their own participation, unless otherwise directed by the President.

3. Situation

a. Conditions.

(1) A general concern or actual threat of an act of terrorism occurring at or during a special event within the US may cause the President to direct federal agencies to implement precautionary measures that may include some of the CM actions described in this appendix. When directed, FEMA will coordinate with the FBI and the affected state to identify potential CM requirements and with federal CM agencies to implement increased readiness operations.

(2) A significant threat or act of terrorism may cause the FBI to respond to and implement a crisis-management response as described in this appendix. FBI requests for

assistance from other federal agencies will be coordinated through the Attorney General and the President with coordination of National Security Council (NSC) groups as warranted. During the course of a crisis-management response, the occurrence of an incident without warning that produces major consequences involving NBC/WMD may cause the President to direct FEMA to implement a CM response as described in this appendix.

(3) FEMA will exercise its authorities and provide concurrent support to the FBI, as appropriate, to the specific incident.

b. Planning Assumptions.

(1) No single agency at the local, state, federal, or private level possesses the authority and the expertise to act unilaterally on many difficult issues that may arise in response to threats or acts of terrorism, particularly if NBC/WMD are involved.

(2) An act of terrorism, particularly an act directed against a large population center within the US involving NBC/WMD, may produce major consequences that would overwhelm the capabilities of may local and state governments almost immediately. Major consequences involving NBC/WMD may overwhelm existing federal capabilities as well.

(3) Local, state, and federal responders may define working perimeters that may overlap to some degree. Perimeters may be used to control access to the area, target public-information messages, assign operational sectors among responding organizations, and assess the potential effects on the population and the environment. Control of these perimeters may be enforced by different authorities, which may impede the overall response if adequate coordination is not established.

(4) If protective capabilities are not available, responders cannot be required to put their own lives at risk in order to enter a perimeter contaminated with NBC material. It is possible that the perimeter will be closed until the effects of the NBC material have degraded to levels that are safe for first responders. Responders should be prepared for secondary devices.

(5) This appendix may be implemented in situations involving major consequences in a single state or multiple states. The FBI will establish coordination relationships among their field offices and with federal agencies supporting crisis management, including FEMA, based on the locations involved.

(6) This appendix may be implemented in situations that also involve consequences in neighboring nations. The DOS is responsible for coordination.

4. Concept of Operations

a. Crisis Management.

(1) PDD-39 reaffirms the FBI's responsibility for a crisis-management response to threats or acts of terrorism that take place within US territories or in international

waters and do not involve the flag vessel of a foreign country. The FBI provides a graduated flexible response to a range of incidents, including the following:

- A credible threat, which may be presented in verbal, written, intelligence-based, or another form.

- An act of terrorism that exceeds the local FBI's field-division capability to resolve.

- The confirmed presence of an explosive device or a WMD capable of causing a significant destructive event, before actual injury or property loss (e.g., a significant threat).

- The detonation of an explosive device, the use of a WMD, or the use of another destructive device, with or without warning, that results in limited injury or death (e.g., limited consequences/state and local CM response).

- The detonation of an explosive device or the use of another destructive weapon, with or without warning, that results in substantial injury or death (e.g., major consequences/federal CM response).

(2) In response to a credible threat involving NBC/WMD, the FBI initiates a threat-assessment process that involves close coordination with federal agencies that have technical expertise to determine the viability of the threat from a technical, as well as a tactical and behavioral standpoint.

(3) The FBI provides the initial notification to law-enforcement authorities within the affected state of a threat or occurrence that the FBI confirms as an act of terrorism. If warranted, the FBI implements an FBI response and simultaneously advises the Attorney General, who notifies the President and NSC groups as warranted, that a federal crisis-management response is required. If a federal crisis-management response is authorized, the FBI activates multiagency crisis-management structures at FBI HQ and the incident site and the responsible FBI field office (see Figure H-3). (The FBI provides guidance on the crisis-management response in the FBI Nuclear/Incident Contingency Plan [Classified] and the FBI Chemical-Biological Incident Contingency Plan [classified].)

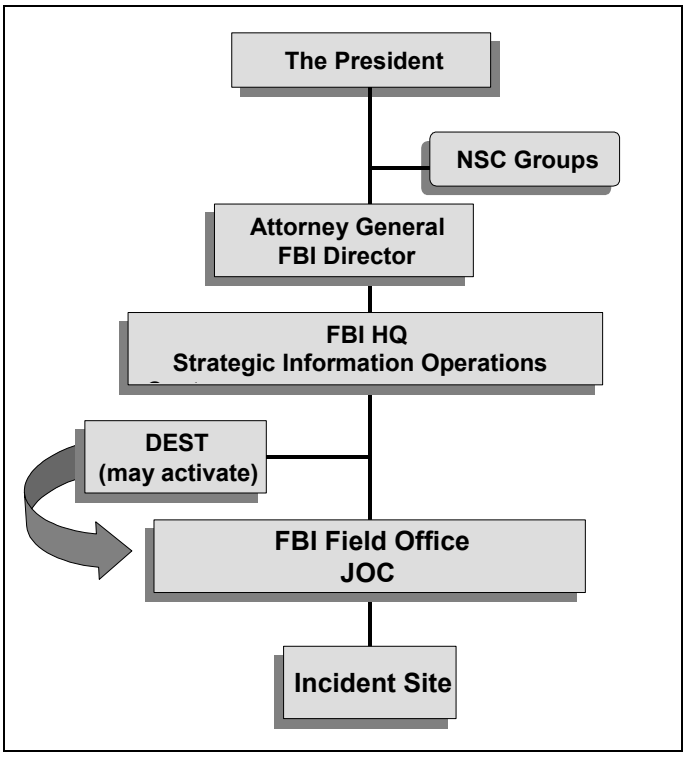

Figure H-3. Multiagency Crisis-Management Structures

(4) Federal agencies requested by the FBI, including FEMA, will deploy a representative to the FBI HQ Strategic Information and Operation Center (SIOC) and take other actions as necessary and appropriate to support crisis management. These representatives will remain deployed to the SIOC as long as deemed necessary by the FBI HQ.

(5) If the threat involves NBC/WMD, the FBI Director may recommend to the Attorney General, who notifies the President and NSC groups as warranted, to deploy a Domestic Emergency Support Team (DEST). The mission of the DEST is to provide expert advice and assistance to the FBI OSC related to the capabilities of the DEST agencies and to coordinate follow-on response assets. When deployed, the DEST merges into the existing JOC structure. (Authorization and coordination procedures and the interagency organizational structure for the DEST are outlined in the PDD-39 Domestic Guidelines [classified].)

(6) During crisis management, the FBI coordinates closely with local law-enforcement authorities to provide a successful law-enforcement resolution to the incident. The FBI also coordinates with other federal authorities, including FEMA. The FBI field office responsible for the incident site modifies its CP to function as a JOC. The JOC structure includes the following standard groups: command, operations, support, and CM. Representation within the JOC includes some federal, state, and local agencies with roles in CM. FEMA notifies federal, state, and local CM agencies selected by the FBI OSC to request that they deploy representatives to the JOC. Selected federal, state, and local CM agencies may be requested to serve in the JOC command group, the JOC support

group/media component, and the JOC CM group (see Figure H-4, shaded boxes). The FBI OSC and the senior FEMA official at the JOC will provide, or obtain from higher authority, an immediate resolution of conflicts in priorities for allocation of critical federal resources (such as airlift or technical-operations assets) between the crisis-management and the CM response.

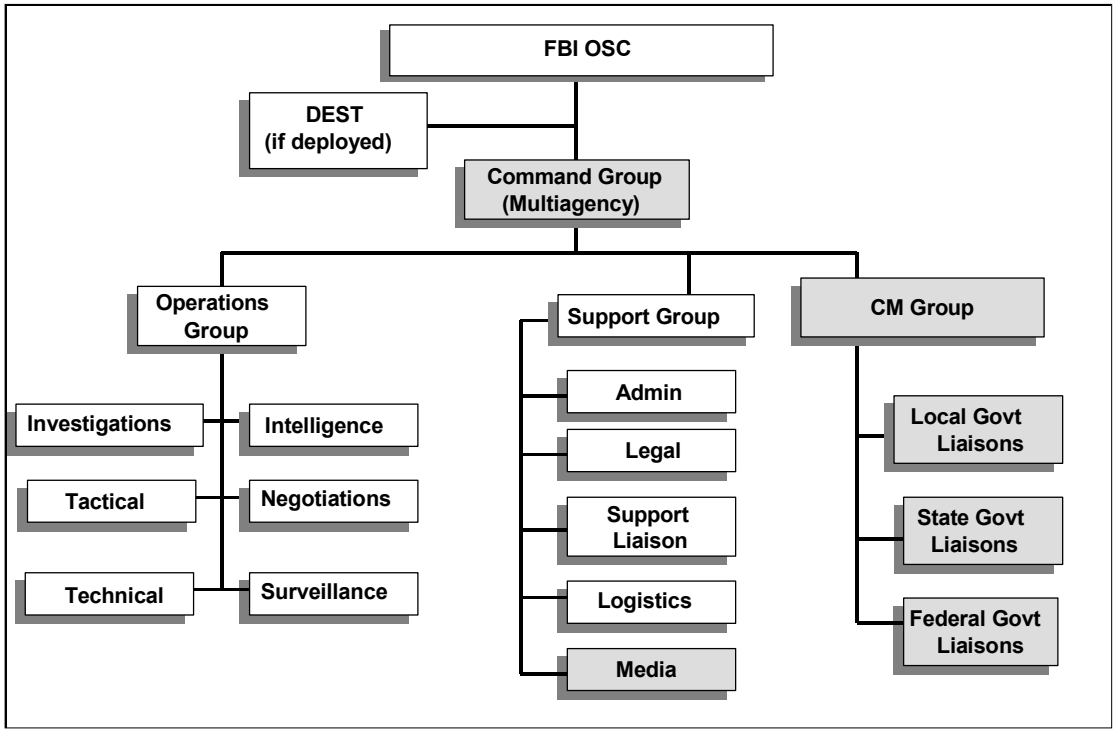

Figure H-4. FBI JOC Structure

(7) A FEMA representative coordinates the actions of the JOC CM group, expedites activation of a federal CM response should it become necessary, and works with a FBI representative who serves as the liaison between the CM group and the FBI OSC. The JOC CM group monitors the crisis-management response in order to advise on decisions that may have implications for CM and to provide continuity should a federal CM response become necessary. Coordination also will be achieved through the exchange of operational reports on the incident. Because reports prepared by the FBI are law-enforcement sensitive, FEMA representatives with access to the reports will review them to identify and forward information to ESF Number 5, which may affect operational priorities and action plans for CM.

b. Consequence Management.

(1) Preincident (Prerelease).

- The FBI may notify federal agencies, including FEMA, of a significant threat or an act of terrorism. Federal agencies requested by the FBI, including FEMA, will deploy a representative to the FBI HQ SIOC. Based on the circumstances, FEMA HQ and

the responsible FEMA region may implement a standard procedure to alert involved FEMA officials and federal agencies supporting CM. FEMA and other federal agencies requested by the FBI OSC will deploy representatives to the JOC(s) being established by the responsible FBI field office. Representatives may include a senior official to serve in the JOC command group to assist the FBI OSC and to provide continuity in leadership should a federal CM response be required.

- Issues arising from the response that affect multiple agency authorities and areas of expertise will be discussed by the FBI OSC and the other members of the JOC command group who are all working in consultation with other local, state, and federal representatives. While the FBI OSC retains authority to make federal crisis-management decisions at all times, operational decisions are made cooperatively to the greatest extent possible.

- The JOC command group ensures coordination of federal crisis-management and CM actions. FEMA deploys representatives with the DEST and deploys additional staff for the JOC, as required, to provide support to the FBI regarding CM. FEMA determines the appropriate agencies to staff the JOC CM group and advises the FBI. Representatives may be requested for the JOC command group, the JOC CM group, and the JIC.

- As a situation progresses, consequences may become imminent. FEMA will consult immediately with the White House and the governor's office to determine if it is authorized by the Stafford Act to assign federal CM agencies to predeploy assets to lessen or avert the threat of a catastrophe. These actions will involve appropriate notification and coordination with the FBI (the overall LFA for counterterrorism).

- FEMA HQ may activate an Emergency Support Team (EST), convene an executive-level meeting of the Catastrophe Disaster Response Group (CDRG), and place an Emergency Response Team–National (ERT-N) on alert. When FEMA activates the EST, it will notify FBI HQ to request a liaison. The responsible FEMA region may activate a Regional Operations Center (ROC) and deploy a representative to the affected state (see Figure H-5). When the responsible FEMA region activates a ROC, it will notify the responsible FBI field office to request a liaison.

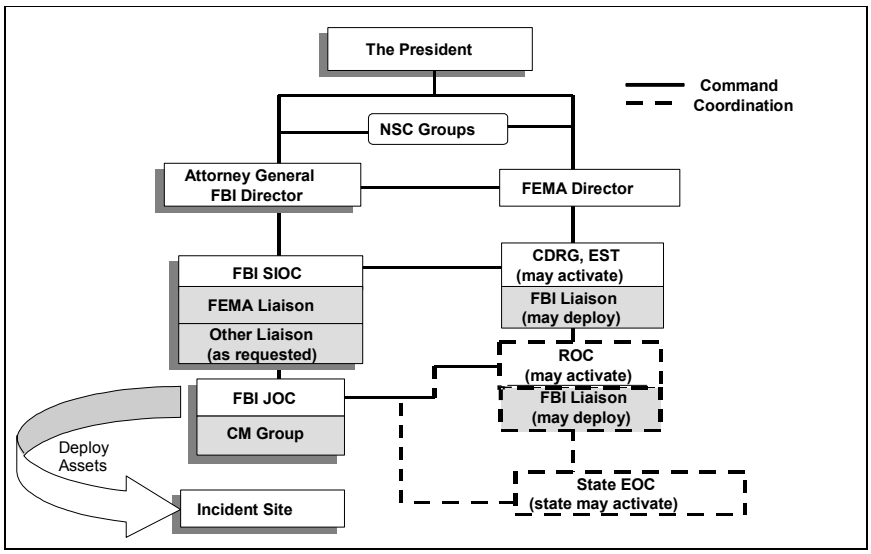

Figure H-5. Preincident CM

(2) Trans-Incident (Situations involving a transition from a threat to an act of terrorism).

- If consequences become imminent or occur that cause the President to direct FEMA to implement a federal CM response, then FEMA will initiate procedures to activate additional FRP structures (the EST, the CDRG, the ROC, and a DFO, if necessary). Federal, state, and local CM agencies will begin to disengage from the JOC (see Figure H-6). The senior FEMA official and liaisons will remain at the JOC until the FBI and FEMA agree that a liaison presence is no longer required.

(3) Postincident (Situations without warning).

- If an incident occurs without warning that produces major consequences and appears to be caused by an act of terrorism, then FEMA and the FBI will initiate CM and crisis-management actions concurrently. FEMA will consult immediately with the White House and the governor's office to determine if a federal CM response is required. If the President directs FEMA to implement a federal CM response, then FEMA will implement portions of this appendix and other FRP annexes as required. FEMA will support the FBI as required and will lead a concurrent federal CM response.

- The overall LFA (either the FBI or FEMA when the Attorney General transfers the overall LFA role to FEMA) will establish a JIC in the field, under OPCON of the overall LFA's Public Information Officer. Throughout the response, agencies will continue to coordinate incident related information through the JIC. FEMA and the FBI will ensure that appropriate spokespersons provide information concerning the crisis-management and CM responses. Before a JIC is activated, PA offices of responding federal agencies will coordinate the release of information through the FBI SIOC.

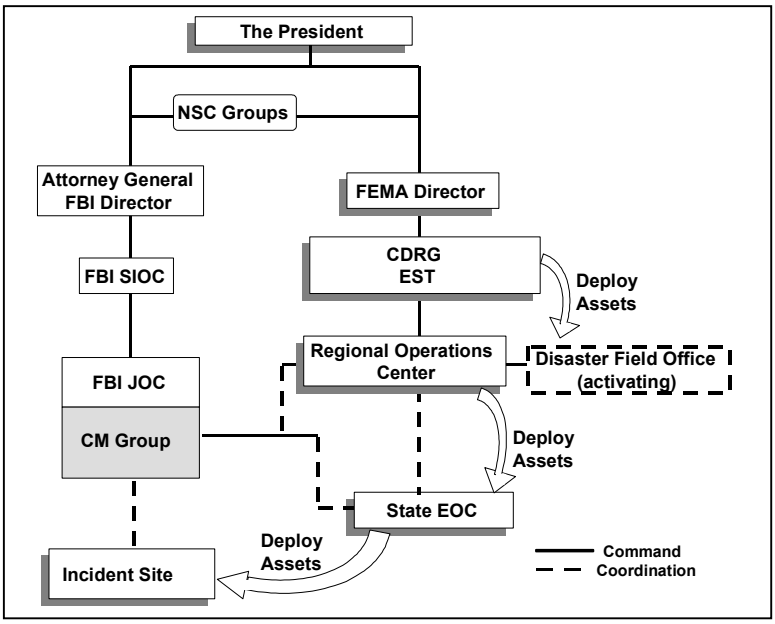

Figure H-6. Trans-Incident CM

- During the CM response, the FBI provides a liaison to either the ROC Director or the FCO in the field and a liaison to the EST Director at FEMA HQ (see Figure H-7). While the ROC Director or FCO retains authority to make federal CM decisions at all times, operational decisions are made cooperatively to the greatest extent possible. Meetings will continue to be scheduled until the FBI and FEMA agree that coordination is no longer required. Operational reports will continue to be exchanged, as described in the preincident phase. The FBI liaisons will remain at the EST and the ROC or DFO until FEMA and the FBI agree that a liaison presence is no longer required.

(4) Disengagement.

- If an act of terrorism does not occur, then the CM response elements disengage when the FEMA Director, in consultation with the FBI Director, directs FEMA HQ and the responsible region to issue a cancellation notification by standard procedure to appropriate FEMA officials and FRP agencies. FRP agencies disengage according to standard procedure.

- If an act of terrorism occurs that results in major consequences, then each FRP structure (the EST, the CDRG, the ROC, and the DFO, if necessary) disengages at the appropriate time according to standard procedures. Following FRP disengagement, operations by individual federal agencies or multiple federal agencies under other federal plans may continue in order to support the affected state and local government with long-term hazard monitoring, environmental decontamination, and site restoration (clean up).

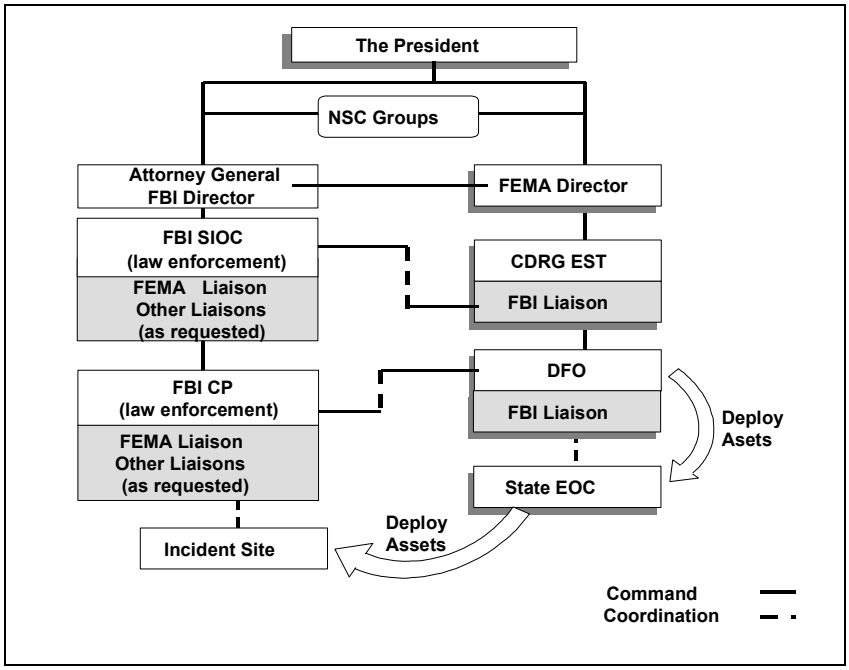

Figure H-7. Postincident CM

5. Responsibilities

a. DOJ. PDD-39 validates and reaffirms existing lead-agency responsibilities for all facets of the US counterterrorism effort. The DOJ is designated as the overall LFA for threats or acts of terrorism that take place within the US until the Attorney General transfers the overall LFA role to FEMA. The DOJ delegates this overall role to the FBI for the operational response. On behalf of the DOJ, the FBI will—

(1) Consult with and advise the White House, through the Attorney General, on policy matters concerning the overall response.

(2) Designate and establish a JOC in the field.

(3) Appoint an FBI OSC to manage and coordinate the federal operational response (crisis management and CM). As necessary, the FBI OSC will convene and chair meetings with operational decision makers representing lead state and local crisis-management agencies, FEMA, and lead state and local CM agencies in order to provide an initial assessment of the situation, develop an action plan, monitor and update operational priorities, and ensure that the overall response is consistent with US law and achieves the policy objectives outlined in PDD-39.

(4) Issue and track the status of actions assigned by the overall LFA.

b. FBI. Under PDD-39, the FBI supports the overall LFA by operating as the lead agency for crisis management. The FBI will—

(1) Determine when a threat or an act of terrorism warrants consultation with the White House, through the Attorney General.

(2) Establish the primary federal operations centers in the field and in Washington, District of Columbia, for crisis management.

(3) Designate appropriate liaison and advisory personnel to support FEMA.

(4) Advise the White House, through the Attorney General, when it requires assistance for a federal crisis-management response, according to the PDD-39.

(5) Work with FEMA to establish and operate a JIC in the field as the focal point for information to the public and the media concerning the federal response to the emergency.

(6) Issue and track the status of crisis-management actions that it assigns.

(7) Appoint an FBI OSC (or subordinate official) to manage and coordinate the crisis-management response. Within this role, the FBI OSC will convene meetings with operational decision makers representing federal, state, and local law-enforcement and technical-support agencies, as appropriate, to formulate incident action plans, define priorities, resolve conflicts, identify issues that require decisions from higher authorities, and evaluate the need for additional resources.

c. FEMA. PDD-39 clarifies and expands upon the responsibilities of FEMA as the LFA for CM. FEMA will—

(1) Appoint a ROC Director or FCO to manage and coordinate the federal CM response in support of state and local governments. In coordination with the FBI, the ROC Director or FCO will convene meetings with decision makers of federal, state, and local emergency management and technical support agencies, as appropriate, to formulate incident action plans, define priorities, resolve conflicts, identify issues that require decisions from higher authorities, and evaluate the need for additional resources.

(2) Issue and track the status of CM actions that is assigns.

(3) Establish the primary FCOs in the field and in Washington, District of Columbia, for a CM response.

(4) Designate appropriate liaison and advisory personnel to support the FBI.

(5) Determine when consequences are “imminent” for purposes of the Stafford Act.

(6) Consult with the White House and the governor's office to determine if a federal CM response is required and if FEMA is directed to use Stafford Act authorities. This process will involve appropriate notification and coordination with the FBI (the overall LFA).

(7) Work with the FBI to establish and operate a JIC in the field as the focal point for information to the public and the media concerning the federal response to the emergency.

d. Federal Agencies Supporting Technical Operations.

(1) Department of Defense. As directed in PDD-39, the DOD will activate technical operations capabilities to support a federal response to threats or acts of nuclear/WMD terrorism. As required under the Constitution and laws of the US, DOD will coordinate military operations within the US with the appropriate civilian lead agency for technical operations.

(2) Department of Energy. As directed in PDD-39, the DOE will activate nuclear response capabilities to support a federal response to threats or acts of nuclear/WMD terrorism. The DOE may coordinate with individual agencies identified and use the structures, relationships, and capabilities described in the FRERP to support response operations. The FRERP does not require formal implementation. Under the FRERP—

- The federal OSC will coordinate the FRERP response with the FEMA official (either the senior FEMA official at the JOC, the ROC Director or the FCO) who is responsible under PDD-39 for on-scene coordination of all federal support to state and local governments (see Figure H-8).

- The FRERP response may include on-site management; radiological monitoring and assessment; development of federal protective action recommendations; and the provision for information to the public, the White House, Members of Congress, and foreign governments on the radiological response. The LFA of the FRERP will serve as the primary federal source of information regarding on-site radiological conditions arid off-site radiological effects.

- The LFA will issue taskings that draw upon funding from the responding FRERP agencies.

(3) Department of Health and Human Services. As directed in PDD-39, the DHHS will activate health and medical response capabilities to support the federal response to threats or acts of NBC/WMD terrorism. The DHHS may coordinate with individual agencies identified and use the structures, relationships, and capabilities described in the DHHS Health and Medical Services Support Plan for the Federal Response to Acts of Chemical-Biological Terrorism to support response operations. If the DHHS plan is implemented—

- The DHHS on-scene representative will coordinate, through the ESF Number 8 Health and Medical Service Leader, the DHHS plan response with the FEMA official (either the senior FEMA official at the JOC, the ROC Director or the FCO) who is responsible under PDD-39 for on-scene coordination of federal support to state and local governments (see Figure H-8).

- The DHHS plan response may include threat assessment, consultation, agent identification, epidemiological investigations, hazard detection and reduction, decontamination, and public health, medical, and pharmaceutical support operations.

- The DHHS will issue taskings that draw upon funding from the responding DHHS plan agencies.

(4) Environmental Protection Agency. As directed in PDD-39, the EPA will activate environmental response capabilities to support the federal response to acts of NBC/WMD terrorism. If the NCP is implemented—

- The HAZMAT OSC under the NCP will coordinate, through the ESF Number 10 primary federal agency, with the FEMA official (either the senior FEMA official at the JOC, the ROC Director, or the FCO) who is responsible under PDD-39 for on-scene coordination of all federal support state and local governments (see Figure H-8).

- The NCP response may include threat assessment, consultation, agent identification, hazard detection and reduction, environmental monitoring, decontamination, and long-term site restoration (environmental clean up) operations.

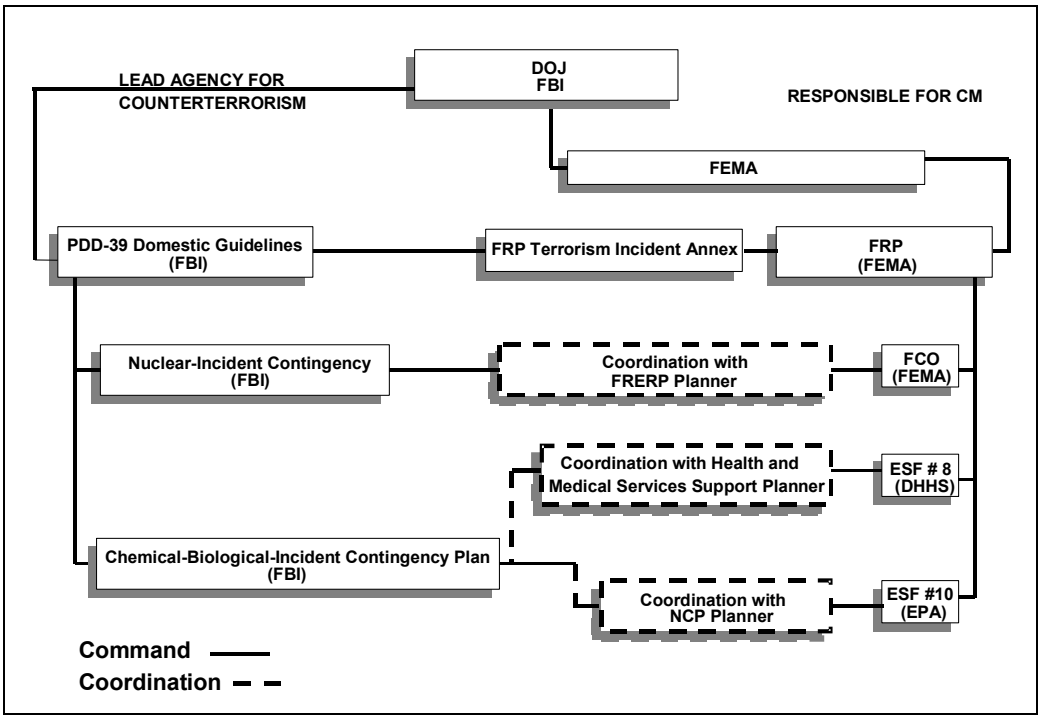

Figure H-8. Relationships Among Federal Plans to Implement PDD-39

6. Funding Guidelines

a. As stated in PDD-39, federal agencies directed to participate in the resolution of terrorist incidents or conduct counterterrorist operations bear the costs of their own participation, unless otherwise directed by the President. This responsibility is subject to specific statutory authorization to provide support without reimbursement. In the absence of such specific authority, the Economy Act applies and reimbursement cannot be waived. This does not preclude federal agencies from reallocating funds from current agency operating budgets, accepting reimbursable work orders offered by other federal agencies, and/or submitting requests for supplemental appropriation to the Office of Management and Budget (OMB) for consideration.

b. FEMA can use limited predeployment authorities in advance of a Stafford Act declaration to lessen or avert the threat of a catastrophe only if the President expresses intention to go forward with a declaration. This authority is further interpreted by congressional intent to the effect that the President must determine that assistance under existing federal programs is inadequate to meet the crisis before FEMA may directly intervene under the Stafford Act. The Stafford Act authorizes the President to issue "emergency" and "major disaster" declarations.

(1) Emergency declarations may be issued in response to a governor's request or in response to those rare emergencies, including some acts of terrorism, for which the federal government is assigned in the laws of the US the exclusive or preeminent responsibility and authority to respond.

(2) Major-disaster declarations may be issued in response to a governor's request for any natural catastrophe or—regardless of cause—any fire, flood, or explosion that has caused damage of sufficient severity and magnitude (as determined by the President) to warrant major-disaster assistance under the Stafford Act.

(3) If a Stafford Act declaration is provided, funding for CM may continue to be allocated from the responding agency's operating budgets, the Disaster Relief Fund (DRF), and supplemental appropriations.

c. If the President directs FEMA to use Stafford Act authorities, it will issue mission assignments through the RFP to support CM.

(1) Mission assignments are reimbursable work orders, issued by FEMA to federal agencies, directing completion of specific tasks. Although the Stafford Act states that "federal agencies may be reimbursed for expenditures from the DRF," it is FEMA's policy to reimburse federal agencies for eligible work performed under mission assignments.

(2) Mission assignments issued to support CM will follow FEMA's SOP for the management of mission assignments or applicable superseding documentation.

d. FEMA provides the following funding guidance to the FRP agencies:

(1) Special Events and the Stafford Act. Commitments by individual agencies to take precautionary measures in anticipation of special events will not be reimbursed under the Stafford Act, unless mission-assigned by FEMA to support CM.

(2) Crisis Management/Law Enforcement and the Stafford Act. Stafford Act authorities do not pertain to law-enforcement functions. Law enforcement or crisis-management actions will not be mission-assigned for reimbursement under the Stafford Act.

Appendix I

FEDERAL RESPONSE-PLAN SUMMARY FOR EMERGENCY-SUPPORT FUNCTIONS

1. Background

a. Purpose. The FRP establishes a process and structure for the systematic, coordinated, and effective delivery of federal assistance to address the consequences of any major disaster or emergency declared under the Stafford Act and Emergency Assistance Act. The FRP—

(1) Sets forth fundamental policies, planning assumptions, CONOPs, response and recovery actions, and federal agency responsibilities.

(2) Describes the array of federal response, recovery, and mitigation resources available to augment state and local efforts to save lives; protect public health, safety, and property; and aid affected individuals and communities in rebuilding after a disaster.

(3) Organizes the types of federal response assistance that a state is most likely to need under the FRP's 12 ESFs, each of which has a designated primary agency.

(4) Describes the process and methodology for implementing and managing federal recovery and mitigation programs and support/technical services.

(5) Addresses linkages to other federal emergency OPLAN developed for specific incidents.

(6) Provides a focus for interagency and intergovernmental emergency preparedness, planning, training, exercising, coordination, and information exchange.

(7) Serves as the foundation for the development of detailed supplemental plans and procedures to implement federal response and recovery activities rapidly and efficiently.

b. Scope.

(1) The FRP's concepts apply to major disaster(s) or emergency(ies) as defined under the Stafford Act, which includes natural catastrophes (fire, flood, or explosion [regardless of cause]) or any other occasion or instance for which the President determines that federal assistance is needed to supplement state and local efforts and capabilities. Throughout the FRP, any reference to a disaster, major disaster, or emergency generally means a presidentially declared major disaster or emergency under the Stafford Act.

(2) The full range of complex and constantly changing requirements that the FRP covers after a disaster are as follows: saving lives, protecting property, and meeting basic human needs (response); restoring the disaster-affected area (recovery); and reducing

vulnerability to future disasters (mitigation). The FRP does not specifically address long-term reconstruction and redevelopment.

(3) The FRP applies to all signatory federal departments and independent agencies that may be tasked to provide assistance in a major disaster or emergency.

(4) Under the FRP, a state means any state of the US, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, American Samoa, and the Commonwealth of the Northern Mariana Islands. Two former trust territories (but now independent countries) are also deemed eligible for assistance under the Compact of Free Association—the Republic of the Marshall Islands and the Federated States of Micronesia.

c. National Disaster-Response Framework.

(1) The combined emergency management authorities, policies, procedures, and resources of local, state, and federal governments, as well as voluntary disaster-relief organizations, the private sector, and international sources constitute a national disaster-response framework for providing assistance following a major disaster or an emergency.

(2) Within this framework, the federal government can provide personnel, equipment, supplies, facilities, as well as managerial, technical, and advisory services in support of state and local disaster-assistance efforts. Various federal statutory authorities and policies establish the bases for providing these resources. FEMA has compiled a separate compendium of legal authorities supporting the FRP that lists emergency-response and recovery-related directives, together with a summary interpretation of each legal citation.

(3) The FRP describes the structure for organizing, coordinating, and mobilizing federal resources to augment state and local response efforts under the Stafford Act and its implementing regulations that appear in 44 Code of Federal Regulations (CFR) 206. The FRP also may be used with the federal agency emergency OPLAN developed under other statutory authorities, as well as MOUs among various federal agencies.

(4) The FRP may be implemented in response to the consequences of terrorism, according to PDD 39 and PDD 62 that set forth US counterterrorism policy. The FRP Terrorism Incident Annex describes the CONOPS for a unified response to a terrorism incident involving two or more of the following plans: the FRP, the FBI WMD Incident Contingency Plan, the DHHS Health and Medical Services Support Plan for the Federal Response to Acts of CB Terrorism, the NCP, and the FRERP.

2. Concept of Operations

a. General.

(1) Most disasters and emergencies are handled by local and state responders. The federal government is called upon to provide supplemental assistance when the consequences of a disaster exceed local and state capabilities. If needed, the federal government can mobilize an array of resources to support state and local efforts. Various

emergency teams, support personnel, specialized equipment, operating facilities, assistance programs, and access to private-sector resources constitute the overall federal disaster operations system. The FRP describes the major components of the system, as well as the structure for coordinating federal response and recovery actions necessary to address state-identified requirements and priorities by use of assets through mechanisms such as the ESF program.

(2) The FRP employs a multiagency operational structure that uses the principles of the ICS, based on a model adopted by the fire and rescue community. The ICS can be used in any size or type of disaster to control response personnel, facilities, and equipment.

(3) The FRP can be partially or fully implemented in anticipation of a significant event or in response to an actual event. Selective implementation through the activation of one or more of the system's components allows maximum flexibility in meeting the unique operational requirements of the situation and interacting with differing state systems and capabilities.

b. Concurrent Implementation of Other Federal Emergency Plans.

(1) An incident involving hazardous substances, WMD, or other lethal agents or materials may require a response under another federal emergency OPLAN (the NCP, the FRERP, etc.). These plans delineate measures necessary to handle or contain released materials and keep the public properly informed and protected.

(2) Several of these plans designate a LFA to coordinate the federal response. The LFA is determined by the type of emergency. In general, a LFA (the FBI) establishes operational structures and procedures to assemble and work with agencies providing direct support to the LFA in order to obtain an initial assessment of the situation, develop an action plan, and monitor and update operational priorities. The LFA ensures that each agency exercises its concurrent and distinct authorities and supports the LFA in carrying out relevant policy. Specific responsibilities of a LFA vary according to the agency's unique statutory authorities.

c. Emergency-Support Functions.

(1) The FRP employs a functional approach that groups under 12 ESFs the types of direct federal assistance that a state is most likely to need (e.g., mass care, health and medical services), as well as the kinds of federal operations support necessary to sustain federal response actions (e.g., transportation, communications). ESFs are expected to support one another in carrying out their respective missions.

(2) Each ESF is headed by a designated agency on the basis of its authorities, resources, and capabilities in a particular functional area. Other agencies have been designated as support agencies for one or more ESFs based on their resources and capabilities to support the functional area(s). ESF agency designations are shown in Table I-1.

(3) Federal response assistance required under the FRP is provided using some or all of the ESFs, as necessary. FEMA will issue a mission assignment to task a primary agency for necessary work to be performed on a reimbursable basis. The primary agency may in turn task support agencies if needed. Specific ESF missions, organizational relationships, response actions, and primary and support agency responsibilities are described in the FRP. In cases where required assistance is outside the scope of an ESF, FEMA may directly task any federal agency to bring its resources to bear in the disaster operation.

(4) RFAs from local jurisdictions are channeled to the SCO through the designated state agencies according to the state's emergency operation plan (EOP) and then to the FCO or designee for consideration. Based on state-identified response requirements and the FCO's or designee's approval, the designated agency for the ESF coordinates with its counterpart state agencies or, if directed, with local agencies to provide the assistance required. Federal fire, rescue, and emergency medical responders arriving on scene are then integrated into the local ICS structure.

d. Military Support.

(1) The DOD maintains significant resources (personnel, equipment, and supplies) that may be available to support the federal response to a major disaster or an emergency. The DOD will normally provide support only when other resources are unavailable and only if such support does not interfere with its primary mission or ability to respond to operational contingencies.

Table I-1. Emergency Support Function Designation Matrix

Agency \ ESF	Transportation	Communications	Public Works and Engineering	Fire Fighting	Information and Planning	Mass Care	Resource Support	Health and Medical Services	USRT	HAZMATs	Food	Energy
USDA	S	S	S	P	S	S	S	S	S	S	P	S
DOC		S	S	S	S		S			S		
DOD	S	S	P	S	S	S	S	S	S	S	S	S
DOEd					S							
DOE					S		S	S		S		P
DHHS			S		S	S		P	S	S	S	
HUD						S						
DOI		S	S	S	S					S		S
DOJ					S			S	S	S		
DOL			S				S		S	S		
DOS	S									S		S
DOT	P				S		S	S		S		S
TREAS	S				S		S					
VA			S			S	S	S				
AID								S	S			
ARC					S	P		S			S	
EPA			S	S	S			S		P	S	
FCC		S										
FEMA	S	S		S	P	S	S	S	P		S	
GSA	S	S			S	S	P	S			S	
NASA					S		S		S			
NCS		P			S		S	S				S
NRC					S					S		S
OPM							S					
SBA					S							
TVA	S		S									S
USPS	S					S		S				

P = Primary Agency: Responsible for coordination of the ESF.
S = Support Agency: Responsible for supporting the primary agency.

NOTE: An ESF-10 (HAZMAT, WMD) response will be based on the NCP with the USCG having the lead in the coastal zone.

(2) Based on the magnitude and type of disaster and the anticipated level of resource involvement, DOD may use or establish a JTF to consolidate and manage supporting operational military activities. TFs are multiservice organizations created to provide a CM response to a major natural or man-made disaster or an emergency. A JTF commander exercises OPCON of all allocated DOD assets (except USACE personnel executing ESF Number 3 missions and USSOCOM assets); provides personnel, equipment, and supplies to the affected area; and provides disaster-response support based on mission assignments received.

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GLOSSARY

PART I—ABBREVIATIONS AND ACRONYMS

A

AAR	after-action report
AC	air conditioning
ACCP	Air Combat Command publication
ADCON	administrative control
AFB	Air Force base
AFFOR	Air Force forces
AFI	Air Force instruction
AFIERA	Air Force Institute for Environment, Safety and Occupational Health Risk Analysis
AFJMAN	Air Force Joint manual
AFM	air-filtration mask
AFM	Air Force manual
AFR	Air Force regulation
AFRRI	Armed Forces Radiobiology Research Institute
AFTAC	Air Force Technical Applications Center
AFTTP	Air Force tactics, techniques, and procedures
AID	Agency for International Development
AIT	Aeromedical Isolation Team
AL	Alabama
AMS	aerial measuring system
AN/PDR	alphanumeric/peak data rate
AO	area of operation
AOR	area of responsibility
APR	air-purifying respirator
AR	Army regulation
AR	Arkansas
ARAC	atmospheric-release advisory capability
ARC	American Red Cross
ARFOR	Army forces
ARNG	US Army National Guard
AT	antiterrorism
ATP	Allied Tactical Publication
attn	attention
ATSDR	Agency for Toxic Substance and Disease Registry

B

BDRP	Biological-Defense Research Program
BIDS	Biological Integrated Detection System, M31 or M31A1
BPHDC	Bhopal Peoples Health and Documentation Clinic

BUMED	Bureau of Medicine
BW	biological warfare

C

Can	Canada
C/V	criticality/vulnerability
C^2	command and control
C4I	command, control, computers, communications and intelligence
CALL	Center for Army Lessons Learned
CAM	Chemical-agent monitor
CB	chemical-biological
CBIRF	Chemical-Biological-Incident Response Force
CBRNE	chemical, biological, radiological, nuclear, and explosive
CB-RRT	Chemical Biological Rapid Response Team
CDC	Center for Disease Control and Prevention
CDR	commander
CDRG	Catastrophe Disaster Response Group
CFR	Code of Federal Regulations
cgy	centigrey
CHEMTREC	Chemical Transportation Emergency Center
CHPPM	Center for Health Promotion and Preventive Medicine
CINC	commander in chief
CIRG	Critical-Incident Response Group
CJCS	Chairman of Joint Chiefs of Staff
CJCSI	Chairman of the Joint Chiefs of Staff Instruction
CJCSM	Chairman of the Joint Chiefs of Staff Memorandum
CM	consequence management
CMA	Chemical Manufacturers Association
CMAT	Consequence-Management Advisory Team
CMDS	commands
CMOC	civil-military operations center
CMRT	Consequence-Management Response Team
CNO	Chief of Naval Operations
CO2	dry chemical
COCOM	combatant command
COM	chief of mission
COMM	commercial
COMDT	commandant
COGARD	Coast Guard
COMFORSCOM	commander forces command
COMSEC	communications security
CONEX	container express
CONOPS	concept of operations
CONPLAN	concept plan
CONPLAN	contingency plan
CONUS	Continental United States
COTS	commercial off the shelf

CP	command post
CPE	Collective Protection Equipment
CRTF	Centralized Recovery and Treatment Facility
CRZ	contamination-reduction zone
CSD	Chemical-Support Division
CSEPP	Chemical Stockpile Emergency Preparedness Program
CSM	Chemical Surety Material
CST	civil support team
CZAA	cold zone assembly area

D

DA	Department of the Army
DART	Disaster-Assistance Response Team
DC	District of Columbia
DCC	displaced civilian center
DCE	defense coordinating element
DCO	defense coordinating officer
DCS	Deployable Communications System
DED	detailed equipment decontamination
dept	department
DEST	Domestic Emergency-Support Team
DFO	disaster field office
DHHS	Department of Health and Human Services
DIA	Defense Intelligence Agency
DNBI	Disease/Nonbattle Injury
DOC	Department of Commerce
DOD	Department of Defense
DODD	Department of Defense Directive
DOE	Department of Energy
DOEd	Department of Education
DOI	Department of Interior
DOJ	Department of Justice
DOL	Department of Labor
DOMS	Director of Military Support
DOS	Department of State
DOT	Department of Transportation
DP	disaster preparedness
DRAGON	Deployable Response and Graphics Operations Network
DRCD	domestic-response casualty decontamination
DRF	disaster-response force
DRF	disaster-relief fund
DSN	defense switched network
DSO	domestic-support operations
DTRA	Defense Threat Reduction Agency
DTRA-CPOX	Defense Threat Reduction Agency-Counterproliferation
DTRG	Defense Technical Response Group
DWFPD	dual wavelength flame photometric detector

E

ECBC	Edgewood Chemical and Biological Center
ECP	entry control point
ED	emergency department
EEI	essential element of information
e.g.	exempli gratia: for example
EMS	emergency medical services
engr	engineer
EOC	emergency operations center
EOD	explosive ordnance disposal
EOP	emergency operations plan
EPA	Environmental Protection Agency
EPLO	emergency preparedness liaison officer
ERAMS	environmental radiation ambient monitoring system
ERT	Environmental Response Team
ERT	Emergency-Response Team
ERT	Evidence Response Teams
ERT-N	Emergency-Response Team—National
ESF	emergency-support function
EST	emergency-support team
etc	et cetera
ext	extension
EXORD	execution order
EZ	exclusion zone

F

FAC	Forensic Analytical Center
FBI	Federal Bureau of Investigation
FCC	Federal Communications Commission
FCO	federal coordinating officer
FDA	Federal Drug Administration
FEMA	Federal Emergency Management Agency
FEST	Foreign Emergency-Support Team
FID	flame ionization detector
FL	Florida
FLA	federal lead agency
FM	field manual
FMFM	Fleet Marine Force manual
FMFRP	Fleet Marine Force reference publication
FORSCOM	US Army Forces Command
FOSC	federal on-scene coordinator
FP	force protection
FPD	flame photometric device
FRERP	federal radiological emergency response plan
FRP	federal response plan

FUNCPLAN	functional plan

G

G1	Army or Marine Corps component manpower or personnel staff officer (Army division or higher staff, Marine Corps brigade or higher staff)
G2	Army or Marine Corps component intelligence staff officer (Army division or higher staff, Marine Corps brigade or higher staff)
G3	Army or Marine Corps component operations staff officer (Army division or higher staff, Marine Corps brigade or higher staff)
G4	Army or Marine Corps component logistics staff officer (Army division or higher staff, Marine Corps brigade or higher staff)
G5	Army or Marine Corps component civil affairs staff officer (Army division or higher staff, Marine Corps brigade or higher staff)
GA	Georgia
GB	sarin
GC	gas chromatograph
GD	soman
govt	government
GPS	global-positioning system
GSA	general services administration

H

HAZCHEM	hazardous chemicals
HAZMAT	hazardous material
HD	mustard gas
HI	Hawaii
HMRU	hazardous-materials response unit
HN	host nation
HPAC	hazard prediction and assessment capability
HQ	headquarters
HSD	halogen selective detector
HUD	Housing and Urban Development
HZAA	hot zone assembly area

I

IAJOC	interagency joint operation center
IC	incident command
ICP	incident control plan
ICS	incident command system
IDLH	immediately dangerous to life and health
i.e.	id est: that is
IED	improvised explosive devices
IM	information management
IMS	incident management system

IO	international organizations
IPE	individual protective equipment
IPLAN	implementation plan
IR	information requirements
IRE	Initial Response Element
IRF	Initial Response Force
IRP	initial rally point
IRT	Initial Response Team

J

J1	Personnel Directorate
J2	Intelligence Directorate
J3	Operations Directorate
J4	Logistics Directorate
J5	Plans and Policy Directorate
J6	Communications-Electronic Directorate
JFC	joint force commander
JIC	joint information center
JNACC	joint nuclear-accident coordination center
JOC	joint operations center
JOPES	joint operations planning and execution system
JP	joint publication
JS	joint staff
JSCP	Joint Strategic Capabilities Plan
JSOTF	Joint Special Operations Task Force
JTAC	Joint Technical Augmentation Cell
JTF	Joint Task Force
JTF-CS	Joint Task Force-Civil Support
JTOT	Joint Technical Operations Team
JULLS	Joint Universal Lessons Learned System

K

KS	Kansas

L

LAN	local-area network
LEA	law enforcement agencies
LEL	lower explosive level
LFA	lead federal agency
LOA	lead operational authority
LOC	lines of communication
LOG	logistics

M

MACA	military assistance to civil authorities
MACDIS	military assistance for civil disturbances
maint	maintenance
MARFORLANT	Marine Corps Forces, Atlantic
MCBAT	Medical Chemical Biological Advisory Team
MCCDC	Marine Corps Combat Development Command
MCHT	modular chemically hardened tent
MCPDS	Marine Corps Publication Distribution System
MCPS	modular command post system
MCRP	Marine Corps reference publication
MD	Maryland
MEAP	mobile environmental analytical platform
MED	medical
MEDCOM	medical command
MEF	Marine Expeditionary Force
METOC	meteorology and oceanography
MG	major general
MGPTS	modular general purpose tent system
mgt	management
MIC	methyl isocynate
MILSTRIP	military standard requisitioning and issue procedures
MILVAN	military-owned demountable container
min	minute
MINICAMS	miniature chemical-agent monitor system
MMC	material management center
MMST	Metropolitan Medical Strike Team
MO	Missouri
MOA	memorandum of agreement
MOOTW	military operations other than war
MOPP	mission-oriented protective posture
MOU	memorandum of understanding
MRAT	Medical Radiobiology Advisory Team
MSCA	military support to civil authorities
MSD	mass selective detector
MSD	military support detachment
MSDS	materiel safety data sheets
MSLEA	military support to law-enforcement agencies
MTP	mission training plan
MTTP	multiservice tactics, techniques, and procedures

N

NAERG	North American Emergency Response Guide
NASA	National Aeronautics and Space Administration
NATO	North Atlantic Treaty Organization
NAVFAC	Naval facility

NAVFOR	Navy forces
NAVMED	Naval Medical Command
NBC	nuclear, biological, and chemical
NBC-PC	nuclear, biological, chemical–protective cover
NCA	National Command Authority
NCP	National Contingency Plan
NCRSO	National Capitol Render Safe Organization
NCS	National Communications System
NDPO	National Domestic Preparedness Office
NEHC	US Navy Environmental Health Center
NEIC	National Enforcement Investigations Center
NEPMU	US Navy Environmental and Preventive Medicine Units
NEST	Nuclear Emergency Support Team
NFPA	National Fire Protection Association
NG	National Guard
NGO	nongovernmental organization
NIOSH	National Institute for Occupational Safety and Health
NJ	New Jersey
NMCC	National Military Command Center
NMRC	Naval Medical Research Center
NMRT	National Medical-Response Team
NRC	National Response Center
NRC	Nuclear Regulatory Commission
NRL	Navy research lab
NRS	National Response System
NRT	National Response Team
NSC	National Security Council
NSF	National Strike Force
NWDC	Navy Warfare Development Command
NWP	Naval warfare publication
NV	Nevada

O

O2	oxygen
OC	operations center
OCONUS	outside the continental United States (includes Alaska and Hawaii)
OFDA	Office of Foreign Disaster Assistance
OIL	open incident listing
OMB	Office of Management and Budget
OP	operational
OPCON	operational control
OPLAN	operations plan
OPM	Office of Personnel Management
OPORD	operations order
OPR	offices of primary responsibility
OPREP	operations report
OPSEC	operations security

OSC	on-scene commander
OSD	Office of the Secretary of Defense
OSHA	Occupational Safety and Health Administration

P

PA	public affairs
PA	Pennsylvania
PACAFP	Pacific Air Force publication
PAO	public affairs officer
PAZ	protective-action zone
PDD	Presidential Decision Directive
PFPD	pulse flame photometric detector
PHS	Public Health Service
PIH	poison inhalation hazards
PM	provost marshal
POC	point of contact
PPE	personal protective equipment
PVNTMED	preventive medicine

R

RADCON	radiological control
RADIAC	radiation detection, indication, and computation
RAMT	Radiological Advisory Medical Team
RAP	radiological assistance program
RAPID	ruggedized advanced pathogen identification device
RAT	Radioanalytical Assessment Team
RC	reserve component
RDD	radiological dispersal device
REAC/TS	Radiation Emergency Assistance Center/Training Site
RERT	Radiological Emergency-Response Team
RFA	request for assistance
RI	Rhode Island
RMC	regional medical commands
ROC	regional operations center
ROE	rules of engagement
RRIS	Rapid-Response Information System
RRT	regional response team
RTAP	real-time analytical platform
RTF	response task force
RTF-E	Response Task Force-East
RTF-W	Response Task Force-West

S

S1	battalion or brigade manpower or personnel staff officer (Army, Marine Corps battalion or regiment)

S2	battalion or brigade intelligence staff officer (Army, Marine Corps battalion or regiment)
S3	battalion or brigade operations staff officer (Army, Marine Corps battalion or regiment)
S4	battalion or brigade logistics staff officer (Army, Marine Corps battalion or regiment)
S5	battalion or brigade civil affairs staff officer (Army, Marine Corps battalion or regiment)
S6	battalion or brigade communications staff officer (Army, Marine Corps battalion or regiment)
SAR	search and rescue
SAR	supplied-air respirators
SBA	Small Business Administration
SBCCOM	Soldier Biological Chemical Command
SCBA	self-contained breathing apparatus
SCIF	sensitive compartmented information facility
SCO	state coordinating officer
SECDEF	Secretary of Defense
SEP	special events package
SIOC	strategic information and operation center
SIPRNET	Secret Internet Protocol Router Network
SJA	staff judge advocate
SMART	Special Medical Augmentation Response Team
SMART-CB	Special Medical Augmentation Response Team–Chemical/Biological
SMART-PM	Special Medical Augmentation Response Team–Preventive Medicine
SMART-V	Special Medical Augmentation Response Team–Veterinary
SME	subject matter expert
SN	strategic national
SOCOM	Special-Operations command
SOF	Special-Operations forces
SOFA	status of forces agreement
SPECWAR	special warfare
spt	support
SSRE	security, search, and rescue element
ST	strategic theater
STANAG	standardization agreement (NATO)
SW	southwest
SZ	support zone

T

TAC	technical augmentation cell
TACNOTE	tactical note
TACON	tactical control
TAG	the adjutant general
TAML	Theater Army Medical Lab
TEMPER	tent extendible modular, personnel
TET	Theater Epidemiology Team

TEU	Technical Escort Unit
TF	task force
TFA	toxic-free area
THREATCON	threat condition
TIC	toxic industrial chemicals
TIM	toxic industrial materials
TM	team
TRADOC	Training and Doctrine Command
TRANSCOM	US Army Transportation Command
TREAS	Department of Treasury
TSP	training support package
TTP	tactics, techniques, and procedures
TVA	Tennessee Valley Authority
TX	Texas

U

U	unclassified
UK	United Kingdom
UC	unified command
UJTL	universal joint task list
US	United States
USACE	US Army Corps of Engineers
USACHPPM	US Army Center for Health Promotion and Preventive Medicine
USACOM	US Atlantic Command
USAF	US Air Force
USAFEP	US Air Force Europe publication
USAID	US Agency for International Development
USAMEDCOM	US Army Medical Command
USAMRICD	US Army Medical Research Institute of Chemical Defense
USAMRIID	US Army Medical Research Institute of Infectious Diseases
USAR	US Army Reserve
USC	US Code
USCG	US Coast Guard
USCINCACOM	US Commander in Chief Atlantic Command
USCINCACOMINST	US Commander in Chief Atlantic Command Instructions
USCINCJFCOM	US Commander in Chief, Joint Forces Command
USCINCSO	US Commander in Chief, Southern Command
USDA	US Department of Agriculture
USG	US Government
USJFCOM	US Joint Forces Command
USMC	US Marine Corps
USN	US Navy
USPACOM	US Pacific Command
USPS	US Postal Service
USRT	Urban Search and Rescue Team
USSBCCOM	US Soldier and Biological Chemical Command
USSOCOM	US Special-Operations Command

USSOUTHCOM	US Southern Command
USSS	US Secret Service
USUHS	Uniformed Services University of the Health Sciences
UT	Utah
UTM	universe transverse Mercator (grid referencing system)
UTC	universal time, coordinated

V

VA	Veterans Administration
VA	Virginia
VIP	very important person
VX	o-ethyl s-diisopropylaminomethyl methylphosphonothiolate (chemical nerve agent)

W

WAN	wide-area network
WMD	weapons of mass destruction
WMDAAC	WMD Assessment and Analysis Center
WMD-CST	Weapons of Mass Destruction Civil-Support Team

Z

ZULU	Greenwich Mean Time (universal time, coordinated [UTC])

PART II – TERMS AND DEFINITIONS

Aerosol. A liquid or solid composed of finely divided particles suspended in a gaseous medium. Examples of common aerosols are mist, fog, and smoke. (JP 1-02)

Agent. See biological or chemical agent.

Antiterrorism. Defense measures used to reduce the vulnerability of individuals and property to terrorist acts, to include limited response and containment by local military forces. Also called AT. (JP 1-02)

Area of operations. An operational area defined by the joint force commander for land and navel forces. Areas of operation do not typically encompass the entire operational area of the joint force commander, but should be large enough for component commanders to accomplish their missions and protect their forces. (JP 1-02)

Avoidance. Individual and/or unit measures taken to avoid or minimize nuclear, biological, and chemical (NBC) attacks and reduce the effects of NBC hazards. (JP 1-02)

Biological agent. A microorganism that causes disease in personnel, plants, or animals or causes the deterioration of material. (JP 1-02)

Chemical agent. Any toxic chemical intended for use in military operations. (JP 1-02)

Chemical warfare. All aspects of military operations involving the employment of lethal and incapacitating munitions/agents and the warning and protective measures associated with such offensive operations. Since riot control agents and herbicides are not considered to be chemical warfare agents, those two items will be referred to separately or under the broader term "chemical," which will be used to include all types of chemical munitions/agents collectively. Also called CW. (JP 1-02)

Civil-military operations center. An ad hoc organization, normally established by the geographic combatant commander or subordinate joint force commander, to assist in the coordination of activities of engaged military forces, and other United States Government agencies, non-governmental organizations, private voluntary organizations, and regional and international organizations. There is no established structure, and its size and composition are situation dependent. (JP 1-02)

Collective nuclear, biological, and chemical protection. Protection provided to a group of individuals in a nuclear, biological, and chemical environment, which permits relaxation of individual nuclear, biological, and chemical protection. (JP 1-02)

Collective protection. See collective nuclear, biological, and chemical protection. (JP 1-02)

Combatant command. A unified or specified command with a broad continuing mission under a single commander established and so designated by the President, through the

Secretary of Defense and with the advice and assistance of the Chairman of the Joint Chiefs of Staff. Combatant commands typically have geographic or functional responsibilities. (JP 1-02)

Combatant commander. A commander in chief of one of the unified or specified combatant commands established by the President. (JP 1-02)

Command and control. The exercise of authority and direction by a properly designated commander over assigned and attached forces in the accomplishment of the mission. Command and control functions are performed through an arrangement of personnel, equipment, communications, facilities, and procedures employed by a commander in planning, directing, coordinating and controlling forces and operations in the accomplishment of the mission. (JP 1-02)

Consequence management. 1. Refers to measures taken to protect public health and safety, restore essential government services, and provide emergency relief to governments, businesses, and individuals affected by the consequences of terrorism (Federal Emergency Management Agency [FEMA] definition). 2. Those planning actions and preparations taken to identify, organize, equip, and train emergency response forces and to develop and execute plans implemented in response to an accident; and, the actions following an accident to mitigate and recover from the effects of an accident. (DODD 3150.8). 3. Comprises those essential services and activities required to manage and mitigate problems resulting from disasters and catastrophes. Such services and activities may include transportation, communications, public works and engineering, fire fighting, information planning, mass care, resources support, health and medical services, urban search and rescue, hazardous materials, food, and energy. (DODD 3025.15; JP 3.07.6).

Contamination. 1. The deposit and/or absorption of radioactive material or biological or chemical agents on and by structures, areas, personnel, or objects. 2. Food and/or water made unfit for consumption by humans or animals because of the presence of environmental chemicals, radioactive elements, bacteria, or organisms. 3. The by-product of the growth of bacteria or organisms in decomposing material (including food substances) or waste in food or water. (JP 1-02)

Contamination control. Procedures instituted to limit the spread of contamination from the site of original deposition; includes control of decontamination solutions used during the decontamination process. (JP 1-02)

Contamination avoidance. Individual and/or unit measures taken to avoid or minimize NBC attacks and reduce the effects of NBC hazards. (JP 3-11)

Crisis management. Refers to measures to identify, acquire, and plan the use of resources needed to anticipate, prevent, and/or resolve a threat or act of terrorism. The Federal Government exercises primary authority to prevent preempt, and terminate threats or acts of terrorism and to apprehend and prosecute the perpetrators; state and local governments provide assistance as required. Crisis management is primarily a law enforcement function (Federal Response Plan, April 1999).

Decontamination. The process of making any person, object, or area safe by absorbing, destroying, neutralizing, making harmless, or removing chemical or biological agents, or by removing radioactive material clinging to or around it. (JP 1-02)

Detection. In nuclear, biological, and chemical (NBC) environments, the act of locating NBC hazards by use of NBC detectors or monitoring and/or survey teams. (JP 1-02)

Essential elements of information. The critical items of information regarding the enemy and the environment needed by the commander by a particular time to relate with other available information and intelligence in order to assist in reaching a logical decision. Also called EEI. (JP 1-02)

Evacuation. 1. The process of moving any person who is wounded, injured, or ill to and/or between medical treatment facilities. 2. The clearance of personnel, animals, or materiel from a given locality. 3. The controlled process of collecting, classifying, and shipping unserviceable or abandoned materiel, United States and foreign, to appropriate reclamation, maintenance, technical intelligence, or disposal facilities. (JP 1-02)

Federal Bureau of Investigation. The federal department responsible for planning, directing and coordinating federal crisis management assistance to Federal, State, and local authorities during a Chemical/Biological (CB) terrorist incident. (FRP 9230.1-PL)

Federal Emergency Management Agency. The federal department responsible for planning, directing, and coordinating federal consequence management assistance to Federal, State, and local authorities during a CB terrorist incident. (FRP 9230.1-PL)

Host-nation support. Civil and/or military assistance rendered by a nation to foreign forces within its territory during peacetime, crisis or emergencies, or war based on agreements mutually concluded between nations. Also called HNS. (JP 1-02)

Hot zone. Area immediately surrounding a dangerous goods incident, which extends far enough to prevent adverse effects from released dangerous goods to personnel outside the zone. The zone is also referred to as exclusion zone, red zone or restricted zone in other documents. (EPA Standard Operating Safety Guidelines, OSHA 29CFR 1910.120, NFPA 472.)

Individual protection. Actions taken by individuals to survive and continue the mission under nuclear, biological, and chemical conditions. (JP 1-02)

Individual protective equipment. In nuclear, biological and chemical warfare, the personal clothing and equipment required to protect an individual from biological and chemical hazards and some nuclear effects. (JP 1-02)

Industrial chemicals. Chemicals developed or manufactured for use in industrial operations or research by industry, government, or academia. These chemicals are not primarily manufactured for the specific purpose of producing human casualties or rendering equipment, facilities, or areas dangerous for human use. Hydrogen cyanide,

cyanogens chloride, phosgene, and chloropicrin are industrial chemicals that also can be military chemical agents. (JP 1-02)

Joint Force Commander. General term applied to a combatant commander, sub-unified commander, or joint task force commander authorized to exercise combatant command (command authority) or operational control over a joint force. Also called JFC. (JP 1-02)

Lead Federal Agency. Agency named in various Federal emergency operations plan (National Contingency Plan, Federal Radiological Emergency Response Plan, Federal Response Plan, etc.) with primary responsibility to coordinate the Federal response. The type of emergency determines the LFA. In general, an LFA establishes operational structures and procedures to assemble and work with agencies providing direct support to the LFA in order to obtain an initial assessment of the situation, develop an action plan, and monitor and update operational priorities. The LFA ensures that each agency exercises its concurrent and distinct authorities and supports the LFA in carrying out relevant policy. Specific responsibilities of an LFA vary according to the agency's unique statutory authorities. If the incident also involves concurrent implementation of the FRP, the LFA and FEMA coordinate to the maximum extent practical to ensure effective, unified Federal actions, consistent with their distinct authorities and responsibilities. Direct FEMA support to an LFA is limited to FEMA's own authorities, resources, and expertise as an individual agency. In a response to an emergency involving a radiological hazard, the LFA under the FRERP is responsible for Federal oversight of activities on site and Federal assistance to conduct radiological monitoring and assessment and develop protective action recommendations. When a radiological emergency warrants action under the Stafford Act, FEMA uses the FRP to coordinate the non-radiological response to consequences off site in support of the affected State and local governments. If the FRERP and FRP are implemented concurrently, the Federal On-Scene Commander under the FRERP coordinates the FRERP response with the FCO, who is responsible for coordination of all Federal support to State and local governments. (Operational interfaces between the FRP and other Federal emergency plans are covered in more detail in the pertinent ESF and incident annexes.) For WMD and Terrorism incidents, the LFAs for Crisis and Consequence Management, respectively. (FRP 9230.1-PL)

Logistics. The science of planning and carrying out the movement and maintenance of forces. In its most comprehensive sense, those aspects of military operations which deal with: a. design and development, acquisition, storage, movement, distribution, maintenance, evacuation, and disposition of materiel; b. Movement, evacuation, and hospitalization of personnel; c. acquisition or construction, maintenance, operation, and disposition of facilities; d. Acquisition or furnishing of services. (JP 1-02)

Mission-oriented protective posture. A flexible system of protection against nuclear, biological, and chemical contamination. This posture requires personnel to wear only that protective clothing and equipment (mission-oriented protective posture gear) appropriate to the threat level, work rate imposed by the mission, temperature, and humidity. Also called MOPP. (JP 1-02)

Mission-oriented protective posture gear. Military term for individual protective equipment including suit, boots, gloves, mask with hood, first aid treatments, and decontamination kits issued to soldiers. Also called MOPP gear. (JP 1-02)

National Response Center. The NRC is the 24-hour NRT communications center located at Coast Guard Headquarters, Washington, DC. The NRC receives telephone reports of accident-incidents, WMD, TIM hazards and is capable of notifying or requesting assistance from all Federal agencies. (FRP 9230.1-PL)

National Response Team. The NRT is composed of 14 Federal agencies charged with the responsibility for providing oversight of the nation's ability to respond to accident-incidents. The NRT is responsible for national level planning, preparedness, and response actions. The NRT does not respond directly to a CAI but is available to provide for additional resources if requested. (FRP 9230.1-PL)

Nongovernmental organizations. Transnational organizations of private citizens that maintain a consultative status with the Economic and Social Council of the United Nations. Nongovernmental organizations may be professional association, foundations, multinational businesses, or simply groups with a common interest in humanitarian assistance activities (development and relief). "Nongovernmental organizations" is a term normally used by non-United States organizations. (JP 1-02)

Nuclear, biological, and chemical conditions. See nuclear, biological, and chemical environment.

Nuclear, biological, and chemical environment. Environments in which there is deliberate or accidental employment, or threat of employment, of nuclear, biological, or chemical weapons; deliberate or accidental attacks or contamination with toxic industrial materials, including toxic industrial chemicals; or deliberate or accidental attacks or contamination with radiological (radioactive) materials. (JP 1-02)

On-Scene Commander. The military officer or senior official who commands forces and supervises all operations at the scene of accidents or significant incidents. Directs actions at an accident-incident/disaster site to mitigate damage, save lives, restore primary mission asserts, and assist civil authorities, normally the installation support group commander. (JP 1-02)

On-Scene Coordinator. The federal official pre-designated to coordinate and direct federal response. (FRP 9230.1-PL)

Operational Control. Transferable command authority that may be exercised by commanders at any echelon at or below the level of combatant command. Operational control is inherent in combatant command (command authority). Operational control may be delegated and is the authority to perform those functions of command over subordinate forces involving organizing and employing commands and forces, assigning tasks, designating objectives, and giving authoritative direction necessary to accomplish the mission. Operational control includes authoritative direction over all aspects of military operations and joint training necessary to accomplish missions assigned to the command.

Operational control should be exercised through the commanders of subordinate organizations. Normally this authority is exercised through subordinate joint force commanders and service and/or functional component commanders. Operational control normally provides full authority to organize commands and forces and to employ those forces as the commander in operational control considers necessary to accomplish assigned missions. Operational control does not, in and of itself, include authoritative direction for logistics or matters of administration, discipline, internal organization, or unit training. Also called OPCON. (JP 1-02)

Private voluntary organizations. Private, nonprofit humanitarian assistance organization involved in development and relief activities. Private voluntary organizations are normally United States-based. "Private voluntary organization" is often used synonymously with the term "non-governmental organizations." Also called PVO. (JP 1-02)

Protection. Measures that are taken to keep NBC, WMD, TIM hazards from having an adverse effect on personnel, equipment, or critical assets and facilities. (JP 1-02)

Psychological operations. Planned operations to convey selected information and indicators to foreign audiences to influence their emotions, motives, objective reasoning, and ultimately the behavior of foreign governments, organizations, groups, and individuals. The purpose of the psychological operations is to induce or reinforce foreign attitudes and behavior favorable to the originator's objectives. Also called PSYOP. (JP 1-02)

Reconnaissance. A mission undertaken to obtain information by visual observation, or other detection methods, about the activities and resources of an enemy or potential enemy, or about the meteorological, hydrographic, or geographic characteristics of a particular area. Reconnaissance differs from surveillance primarily in duration of the mission. (JP 1-02)

Response Task Force. There are two RTF headquarters, RTF-East, assigned to 1st U.S. Army (FORSCOM), and RTF-West, assigned to 5th U.S. Army (FORSCOM). They are distinct from their parent U.S. Army headquarters and exercise command and control of DOD assets (minus Special Operations Forces). The RTF is not a force provider, but rather receives OPCON of DOD forces and exercises command and control of these assets in support of the LFA as it responds to a WMD event. (FRP 9230.1-PL)

Rules of engagement. Directives issued by competent military authority which delineate the circumstances and limitations under which United States forces will initiate and/or continue combat engagement with other forces encountered. Also called ROE. (JP 1-02)

Security. 1. Measures taken by a military unit, an activity or installation to protect itself against all acts designed to, or which may, impair its effectiveness. 2. A condition that results form the establishment and maintenance of protective measures that ensure a state of inviolability from hostile acts or influences. 3. With respect to classified matter, it is the condition that prevents unauthorized persons from having access to official information that is safeguarded in the interests on national security. (JP 1-02)

Status-of-forces agreement. An agreement that defines the legal position of a visiting military force deployed in the territory of a friendly state. Agreements delineating the status of visiting military forces may be bilateral or multilateral. Provisions pertaining to the status of visiting forces may be set forth in a separate agreement, or they may form a part of a more comprehensive agreement. These provisions describe how the authorities of a visiting force may control members of that force and the amenability of the force or its members to the local law or to the authority of local officials. To the extent that agreements delineate matters affecting the relations between a military force and civilian authorities and population, they may be considered as civil affairs agreements. Also call SOFA. (JP 1-02)

Survey. Directed effort by individuals or teams to determine the location, area affected, and identification (if possible) of chemical agents and/or radiological material in a specific location. (JP 1-02)

Tactical control. Command authority over assigned or attached forces or command, or military capability or forces made available for tasking, that is limited to the detailed and, usually, local direction and control of movements or maneuvers necessary to accomplish missions or tasks assigned. Tactical control is inherent in operational control. Tactical control may be delegated to, and exercised at any level at or below the level of combatant command. Also called TACON. (JP 1-02)

Terrorism. The calculated use of violence or threat of violence to inculcate fear; intended to coerce; or to intimidate governments or societies in the pursuit of goals that are generally political, religious or ideological. (JP 1-02)

Toxic industrial chemicals. Any chemical hazard which is toxic and/or lethal and which is not designed specifically for military purposes, however, may be employed as a chemical warfare agent. (JP 3-11)

Warm zone. Area between the Hot and Cold zones where personnel and equipment decontamination and hot zone support take place. It includes control points for the access corridor and thus assists in reducing the spread of contamination. Also referred to as the contamination reduction corridor (CRC), contamination reduction zone (CRZ), yellow zone or limited access zone in other documents. (EPA Standard Operating Safety Guidelines, OSHA 29 CFR 1910.120, NFPA 472).

Weapons of Mass Destruction. In arms control usage, weapons that are capable of a high order of destruction and/or of being used in such a manner as to destroy large numbers of people. Can be nuclear, chemical, biological, and radiological weapons, but excludes the means of transporting or propelling the weapon where such means is a separable and divisible part of the weapon. Also called **WMD. (**JP 1-02**).** Title 18, USC. 2332a, defines a weapon of mass destruction as (1) any destructive device as defined in section 921 of this title, [which reads] any explosive, incendiary, or poison gas, bomb, grenade, rocket having propellant charge of more than four ounces, missile having an explosive or incendiary charge of more than one-quarter ounce, mine or device similar to the above; (2) poison gas; (3) any weapon involving a disease organism; or (4) any weapon that is designed to release radiation or radioactivity at a level dangerous to human life."

INDEX

A

Adversary/adversaries I-3, I-5, I-10, I-14, F-6
After-action reports (AAR) II-7, V-3, VI-3
Agency for Toxic Substances and Disease Registry (ATSDR) D-17
Ambassador I-1, I-10
Ambulatory decontamination C-11
American Chemical Manufacturers Association (CMA) G-1
Assessment II-2, IV-3, IV-5, IV-8, IV-10, A-3, A-4, A-5, C-8, C-12, D-1, D-11, D-12, D-13, D-14, D-17, D-18, G-2, G-3, G-6, G-7, G-8, H-5, H-11, H-13, H-14
AT planning and response elements F-1, F-2, F-11

B

Bhopal incident I-5
Biological materials G-2

C

Casualty disposition point C-12
Center for Disease Control and Prevention (CDC) D-17
Chemical, biological, radiological, nuclear, and explosive (CBRNE) D-1, D-2
Chemical-Biological-Rapid-Response Team (CB-RRT) II-2, IV-7, D-3
Chemical incident I-5
Chemical Stockpile Emergency Preparedness Program (CSEPP) D-16
Chemical warfare (CW) I-7, A-5, D-2, D-3, D-7, D-11, D-13, G-1, G-6, G-7
Chernobyl disaster I-5
Civil Military Operation Center (CMOC) I-13, II-6, II-7
Clandestine attacks I-3
Cold zone A-6, C-3, C-8
Collective protection I-14, B-5, F-15
Combatant command (COCOM) i, II-2
Command and control (C^2) ii, x, I-10, I-11, I-14, II-1, II-2, II-3, IV-4, IV-6, IV-7, IV-8, V-1, VI-1, A-6, B-1, B-5, D-1, D-8, F-2, G-6, G-8
Command authority I-7
Consequence management (CM) i, I-1, I-2, I-3, I-7, I-9, I-10, I-11, I-13, I-14, II-1, II-2, II-3, IV-5, IV-6, IV-10, V-1, V-2, VI-1, VI-3, A-1, A-4, A-5, D-1, D-5, D-7, D-11, D-15, E-1, H-1, H-2, H-3, H-4, H-5, H-6, H-7, H-8, H-9, H-10, H-11, H-12, H-15, H-16, I-5
Consequence-Management Advisory Team (CMAT) D-1, D-6
Constitutional responsibility I-7
Containment IV-3, IV-10, A-5, C-1, C-2, D-3, D-4, D-15, D-17, D-18
Contaminated casualties III-5, IV-9, D-16
Contamination avoidance I-13
Contamination control I-13, III-4, A-1
Contamination reduction A-5, C-4, C-5
Contamination reduction corridor C-3
Counterforce operations I-1
Country team I-1, I-10
Crisis-Management Critical Incident Response Group (CIRG) D-18

D

Damage and injury profile III-3
Decontaminants C-1, C-4
Decontamination I-2, I-5, I-13, I-15, IV-5, IV-8, IV-9, IV-10, IV-11, V-1, VI-2, A-2, A-5, A-6, C-1, C-2, C-3, C-4, C-5, C-6, C-7, C-8, C-9, C-10, C-11, C-12, C-13, D-3, D-4, D-5, D-7, D-8, D-13, D-15, D-17, D-18, D-19, E-1, E-2, E-3, F-4, F-6, F-7, F-15, F-16, G-3, G-6, G-8, H-10, H-14
Decontamination planning C-1, C-2
Defense coordinating officer (DCO) I-8, IV-6, VI-2, D-6

Defense Coordination Element (DCE) I-8, IV-6, D-6
Defense Technical Response Group (DTRG) D-16
Defense Threat Reduction Agency (DTRA) IV-7, D-1, D-2, D-6, E-2
Deliberate planning III-1
Department of Energy (DOE) D-2, D-5, D-19, I-5
Department of Health and Human Services (DHHS) D-7, D-17, E-2, H-13, H-14, I-2, I-5
Department of State (DOS) I-1, I-2, I-10, I-14, II-4, IV-1, IV-3, IV-6, V-1, A-3, D-5, F-5, F-7, F-11, H-4, I-5
Deployment I-8, I-12, III-1, III-7, V-3, D-5, D-6, D-15
Disaster-Assistance Response Team (DART) D-5
Disaster declaration I-8, II-1, H-15
Disaster Emergency Relief Fund II-1
Disaster field office (DFO) I-8, H-9, H-10
Disengagement D-5, H-10
Domestic-support operations (DSO) I-7, I-9, III-6

E

Edgewood Chemical and Biological Center (ECBC) D-2
Education and training VI-1
Emergency support functions (ESF) I-2, F-2, F-11, F-12, H-7, H-13, H-14, I-1, I-3, I-4, I-5
Emergency treatment area C-9
Environmental Protection Agency (EPA) VI-2, B-1, B-2, D-18, D-19, E-2, H-14, I-5
Equipment decontamination C-4, C-8, D-7
Evacuation III-3, III-4, III-5, IV-8, IV-9, E-1, F-4, F-5, F-6, F-15, F-16, G-4, G-5, G-6
Evidence Response Team (ERT) D-18
Exercises i, I-14, VI-1, VI-3, A-1, B-5, B-6, D-5, E-3, F-2
Explosive ordnance disposal (EOD) D-4, D-5, D-10, D-11, D-16, F-7
Extended CM operations I-13

F

Federal coordinating officer (FCO) I-8, II-3, H-10, H-12, H-13, H-14, I-4
Force protection (FP) I-14, III-2, III-3, III-6, III-7, V-1, D-7, F-1
Foreign Emergency Support Team (FEST) I-11
Foreign operations ii, I-10, II-4, II-6, V-1

G

Geographic combatant commander I-2, II-4, II-6, IV-6, F-10, F-17

H

Hazard prediction VI-3, A-4, E-1
Hazardous-Materials Response Unit (HMRU) D-18
Host nation (HN) ii, I-1, I-2, I-11, I-12, I-13, IV-6, IV-9, V-1, V-2
Hot line C-4, G-6
Hot zone IV-4, IV-5, A-2, A-5, A-6, C-3

I

Immediate assistance I-11, I-12
Incident command (IC) I-14, C-1, C-6
Incident command system (ICS) x, I-1, I-7, II-5, II-6, III-3, IV-1, VI-1, A-5, D-11, D-15, I-3, I-4
Individual protection A-4, B-1, B-2, B-7, F-15
Individual protective equipment (IPE) I-14, I-15, B-1, F-15, G-9
Information management (IM) x, III-3, III-6, IV-7
Information requirements (IR) III-7
Initial response I-13, III-7, IV-5, IV-7, A-4, D-4, D-6
Installation force protection F-1
International organization (IO) II-6

J

Joint force commander (JFC) I-1, I-2, I-8, I-10, II-6, IV-1, IV-5

Joint information center (JIC) IV-8, VI-3, H-8, H-9, H-12, H-13
Joint Nuclear Accident Coordination Center (JNACC) D-2
Joint Tactical Augmentation Cell (JTAC) I-11, IV-6, IV-7
Joint Task Force–Civil Support (JTF-CS) x, I-9, II-1, II-2, II-3, II-4, IV-5

K

Kurdish incident I-6

L

Lead federal agency (LFA) I-1, I-2, I-9, I-10, II-1, II-2, II-6, IV-4, IV-5, IV-6, V-1, VI-1
Legal I-7, III-6, VI-1, VI-3, F-6, I-2
Logistics II-4, II-6, IV-7, V-2, VI-1, A-1, A-2, F-5, F-15

M

Medical I-5, I-6, I-12, I-14, II-4, II-6, II-7, III-2, III-3, III-4, III-5, III-8, IV-3, IV-5, IV-7, IV-8, IV-9, IV-10, IV-11, V-1, V-2, V-3, VI-2
Medical Chemical Biological Advisory Team (MCBAT) D-6, D-7
Medical Radiobiology Advisory Team (MRAT) D-6
Military operations other than war (MOOTW) i, I-3
Military role (Domestic Response) I-7
Military support I-7, I-8, IV-4, IV-6, IV-7, IV-8, D-5, I-4
Modeling VI-3, E-1
Mutual aid I-14, A-3

N

National disaster response framework I-2
National Guard (NG) i, II-4
National Medical-Response Team (NMRT) D-17
National Military Command Center (NMCC) IV-3, F-12
National Response Center (NRC) E-1, E-2
National Response Team (NRT) VI-3
National Strike Force (NSF) D-17
Nation-state I-2, III-2
Naval Medical Research Center (NMRC) D-10
NBC weapons i
Nonambulatory decontamination C-9
Nuclear Emergency Search Team (NEST) D-19
Nuclear materials I-5

O

On-scene coordinator D-17

P

Passive defense I-1
Personal protective equipment (PPE) B-1, B-2, C-4, C-5, C-6, C-7, C-13, D-6, D-17, D-19, E-2, G-9
Predeployment III-7, IV-6, IV-7, H-15
Preventive medicine (PVNTMED) III-5, III-6, IV-9, D-12, D-13, D-14,
Protection in place B-4, B-6
Public affairs (PA) I-12, I-13, IV-8, V-2, VI-3, A-1, D-1, H-9
Public Health Service (PHS) I-11
Public information officer A-3, H-9
Public works I-2, IV-7, IV-10, F-5, F-11

R

Radiation Environmental Laboratories D-19
Radioanalytical Assessment Team (RAT) D-11, D-19
Radiological Advisory Medical Team (RAMT) D-16
Radiological Control Team (RADCON) D-16
Radiological Emergency-Response Team (RERT) D-18
RAPID Response Information System (RRIS) D-15
Redeployment I-11, I-13, III-6, IV-7, V-1, V-3

Reserve-component chemical reconnaissance capable companies D-15
Reserve-component decontamination capable companies D-15
Risk analysis III-2, IV-9, D-14
Rules of engagement (ROE) VI-3, F-12

S

Safety officer A-3
Safety zones IV-5, C-3
Sample evacuation E-1
Shelter in place G-4
Simulation VI-1, VI-3
Special Medical Augmentation Response Team (SMART) D-14, D-12, D-13
Special Medical Augmentation Response Team–Veterinary (SMART-V) D-12, D-14
Special-operations forces (SOF) I-3
State coordination officer (SCO) VI-2, I-4
Support role (domestic) I-2
Support role (foreign) I-2

T

Technical Augmentation Cell (TAC) II-2, D-1
Technical Escort Unit (TEU) III-1, D-4, G-8
Technical information support III-7
Theater Epidemiology Team (TET) D-14
Toxic free area (TFA) I-14
Transition III-5, IV-7, V-1, V-2, C-2, H-9
Triage I-12, C-2, C-3, C-8, C-9, C-10, C-11, C-12, C-13, D-5, D-9, D-14, D-17

U

Unit records II-7
United States Joint Forces Command (USJFCOM) I-8, II-1, II-2, II-3, IV-1, IV-6
United States Pacific Command (USPACOM) II-3, IV-1, VI-2
United States Southern Command (USSOUTHCOM) VI-2
United States Special Operations Command (USSOCOM) II-2, II-3
Urban Search and Rescue Team (USRT) D-17
US Army Soldier Biological-Chemical Command (USASBCCOM) IV-7, D-3
US Marine Corps (USMC) ii, II-2, D-7
USMC Chemical-Biological Incident Response Force (CBIRF) IV-7, D-7, D-8, D-9, D-10

V

Vulnerability analysis III-2, G-2, G-6
Vulnerability mitigation G-1, G-6

W

Warm zone IV-9, A-5, A-6, C-3, C-8, C-11
Weapons of Mass Destruction – Civil Support Team (WMD-CST) I-9, II-4, D-11, D-12

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