

CSEPP Planning Guidance



March 2006

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Department of Homeland Security



Department of the Army

Chemical Stockpile Emergency Preparedness Program

This Planning Guidance reflects a coordinated, joint effort between the Department of the Army and the Department of Homeland Security (DHS) to develop guidance and implement policy for executing the Chemical Stockpile Emergency Preparedness Program (CSEPP) at the Federal, State, local, and tribal levels.

The Office of the Deputy Assistant to the Secretary of the Army for the Elimination of Chemical Weapons (ODASA [ECW]) and the Chemical and Nuclear Preparedness and Protection Division of DHS have reviewed and agreed upon the concepts, guidance, and policy statements identified in this plan. The plan is consistent with Department of the Army and DHS strategic plans and guidance, and utilizes the established CSEPP National Benchmarks. We encourage the CSEPP community to continue to improve the Planning Guidance by recommending changes. These changes to CSEPP policy and guidance will be added through change sheets.

FOR

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Chapter I—Introduction and Overview

A. Introduction

The *Chemical Stockpile Emergency Preparedness Program (CSEPP) Planning Guidance* was developed under the direction of the U.S. Army and the Department of Homeland Security (DHS), which jointly coordinate and direct the development of CSEPP. It was produced to assist State, local, tribal, and Army installation planners in formulating and coordinating plans for chemical events that may occur at the chemical agent stockpile storage locations in the continental United States. This document supersedes the previous *CSEPP Planning Guidance* dated May 17, 1996.

This document is a companion document to the *CSEPP Programmatic Guidance*, which provides guidance and direction to Army installation officials and local, tribal, and State government officials in the administrative aspects of the emergency preparedness program for chemical accidents or incidents (CAIs) involving the transportation, storage, or disposal of chemical warfare agents and materials. These two documents combined contribute to the development and maintenance of an effective emergency preparedness and response capability at and around the continental U.S. chemical stockpile sites and ensure the coordination of on-post and off-post response preparations and plans.

This document provides broad planning guidance for use by both on-post and off-post agencies and organizations in the development of a coordinated plan for responding to chemical events. The planning guidance contained in this document will help ensure that adequate coordination between on-post and off-post planners occurs during the planning process. This planning guide broadly describes an emergency planning base that assures that critical planning decisions will be made consistently at every chemical agent stockpile location.

This planning guide includes material drawn from other documents developed by DHS, the Army, and other Federal agencies with emergency preparedness program responsibilities. Some of this material has been developed specifically to meet the unique requirements of CSEPP. CSEPP planning should be done in coordination with existing Emergency Operations Plans (EOPs).

In addition to this guidance, other location-specific documents, technical studies, and support studies should be used as needed to assist in the planning at each of the chemical agent stockpile locations to address the specific hazards and conditions at each location. These and other related documents are listed on the CSEPP Portal (<http://www.cseppportal.net>).

Purpose and Scope

This document serves three principal purposes in CSEPP:

- To promote the development of an effective, complete, and comprehensive emergency response capability at each chemical agent stockpile location by providing guidance and direction to assist State, local, tribal, and Army installation planners in formulating, coordinating, and maintaining effective emergency response plans
- To ensure that critical planning decisions are made consistently at all chemical agent stockpile locations by establishing a single adequate and systematic framework for emergency response planning related to CSEPP
- To provide a basis for assessing the adequacy of emergency preparedness planning

This document provides guidance and direction to Army installation officials and local, tribal, and State government officials in the development and maintenance of emergency plans for accidents or incidents involving the transportation, storage, or disposal of lethal military chemical agents. These plans will contribute to the development and sustainment of an effective emergency response capability around each of the continental United States installations and ensure coordination of on-post and off-post response plans. The guidance contained in this document is consistent with [Department of the Army \(DA\) Pamphlet 50-6: *Chemical Accident or Incident Response and Assistance \(CAIRA\) Operations*](#), a publication developed by the Headquarters, Department of the Army (HQDA) for use by Army planners.¹

On February 28, 2003, the President issued [Homeland Security Presidential Directive \(HSPD\)-5](#), which directs the Secretary of Homeland Security to develop and administer a [National Incident Management System \(NIMS\)](#).² According to HSPD-5:

This system will provide a consistent nationwide approach for Federal, State, and local governments to work effectively and efficiently together to prepare for, respond to, and recover from domestic incidents, regardless of cause, size, or complexity. To provide for interoperability and compatibility among Federal, State, and local capabilities, the NIMS will include a core set of concepts, principles, terminology, and technologies covering the incident command system; multiagency coordinating systems; unified command; training; identification and management of resources (including systems for classifying types of resources); qualifications and certification; and the collection, tracking, and reporting of incident information and incident resources.

¹ Headquarters, Department of the Army. *DA Pamphlet 50-6: Chemical Accident and Incident Response and Assistance (CAIRA) Operations*. Washington, D.C.: HQDA, 26 March 2003.

² President George W. Bush. *Homeland Security Presidential Directive (HSPD)-5: Management of Domestic Incidents*. Washington, D.C.: Office of the Press Secretary, White House, 28 Feb. 2003.

The National Response Plan (NRP), dated December 2004 was released to assist jurisdictions as they revise their Emergency Operations Plans (EOPs) to comply with the NIMS.

A major objective of this planning guide is to provide a consistent framework for emergency planning at all CSEPP locations. That does not mean that identical planning decisions should be made at all locations, but that decisions at all locations should be based on the same programmatic criteria and technical information. Each of the communities potentially affected by CSEPP is responsible for deciding how to prepare for the possibility of a release of chemical agent. This guidance document simply defines a comprehensive scope for the decisions and identifies the elements that decision makers should address.

This document does not contain all of the information and detailed technical criteria that will eventually be required for comprehensive emergency plans and resource programs at the stockpile locations. Additional location-specific and programmatic technical guidance is available in a number of technical studies, either completed or ongoing. CSEPP-sponsored publications cited in this Planning Guidance and future CSEPP-sponsored publications that are identified as supplementing the CSEPP Planning Guidance should be considered an integral part of this document.

This document provides planning guidance to be used in preparing emergency plans that cover the most important aspects of the CSEP Program. Subsequent plan refinements can follow the establishment of programs and systems that are based on the technical, location-specific guidance to be provided through Army and DHS support studies and mechanisms.

This document, in conjunction with other specifications and guidelines, also provides a basis for assessing the adequacy of emergency preparedness planning. Inability to comply with this guidance should be appropriately justified since proposals for Federal assistance in conjunction with CSEPP will be evaluated in terms of compliance with this guidance. The [Memorandum of Understanding \(MOU\) between DHS and DA](#), signed in March 2004, specifically calls for DHS to develop standards and evaluation criteria against which emergency preparedness programs can be assessed for adequacy and assurance that they can be implemented. The Army, in turn, agrees to review DHS assessments as to whether off-site plans are adequate and can be implemented. The CSEPP National Benchmark on Coordinated Plans is the principal instruction for ensuring that each CSEPP installation, State, immediate response zone (IRZ) and protective action zone (PAZ) county work together in their planning efforts.³ These agreements and plans would again be consistent with [HSPD-5](#), the [NIMS](#), and the [NRP](#).

³ [2005 CSEPP Programmatic Guidance](#). Chapter 1, Section C.

Each Army installation and State, tribal, and local jurisdiction should follow the guidance contained in this document (including the appended planning guidelines), as well as approved location-specific CSEPP technical studies and support studies on warning, protective measures, and communications equipment. This should be accomplished through the cooperation of local, State, tribal, and Army personnel with technical assistance and oversight provided by the Army and DHS.

The major technical studies that should be utilized in chemical emergency planning at each location are addressed in Chapter III, Section B: Protective Action.

National Incident Management System Compliance

This guide is designed to assist users in producing plans that conform to the requirements of [NIMS](#). NIMS provides a comprehensive national approach to incident management, applicable at all jurisdictional levels and across functional disciplines, that would further improve the effectiveness of emergency response providers⁴ and incident management organizations across a full spectrum of potential incidents and hazard scenarios. Such an approach would also improve coordination and cooperation between public and private entities in a variety of domestic incident management activities.

While most incidents are handled on a daily basis by a single jurisdiction at the local level, there are important instances in which successful domestic incident management operations depend on the involvement of multiple jurisdictions, functional agencies, and emergency responder disciplines. These instances require effective and efficient coordination across this broad spectrum of organizations and activities. NIMS uses a systems approach to integrate the best of existing processes and methods into a unified national framework for incident management. This framework forms the basis for interoperability and compatibility that will, in turn, enable a diverse set of public and private organizations to conduct well-integrated and effective incident management operations. It does this through a core set of concepts, principles, procedures, organizational processes, terminology, and standards requirements applicable to a broad community of NIMS users.

Note: The National Incident Management System (NIMS) is still under development. This CSEPP Planning Guidance document is designed to conform to NIMS requirements as published in mid-2005. Subsequent changes to NIMS requirements will be addressed in future revisions of the guidance.

⁴ As defined in the Homeland Security Act of 2002, Section 2(6), “The term ‘emergency response providers’ includes Federal, State, and local emergency public safety, law enforcement, emergency response, emergency medical (including hospital emergency facilities), and related personnel, agencies, and authorities.” 6 U.S.C. 101(6).

B. Concepts and Principles

CSEPP-specific concepts and principles are as follows:

- **Maximum Protection**—Public Law 99-145, the Congressional mandate for the Chemical Stockpile Disposal Program (CSDP), includes a provision that the Department of Defense (DoD) ensure “maximum protection for the environment, the general public, and the personnel who are involved in the destruction of the lethal chemical agents and munitions....” In that regard, the basic goal of CSEPP is to mitigate the effects of a CAI to the maximum extent practicable.
- **CSEPP National Benchmarks**—The CSEP Program has developed these benchmarks as a basis for operating the Program and ensuring a capability to effectively respond to a CAI.

Information on the principles of the Program will be in the [CSEPP Programmatic Guidance](#), Chapter 1.

NIMS concepts and principles are as follows:

- **Flexibility**—NIMS provides a consistent, flexible, and adjustable national framework within which government and private entities at all levels can work together to manage domestic incidents, regardless of their cause, size, location, or complexity. This flexibility applies across all phases of incident management (prevention, preparedness, response, recovery, and mitigation).
- **Standardization**—NIMS provides a set of standardized organizational structures (e.g., Incident Command System [ICS], multiagency coordination systems, and public information systems), as well as requirements for processes, procedures, and systems designed to improve interoperability among jurisdictions and disciplines in various areas, including the following:
 - Training;
 - Resource management;
 - Personnel qualification and certification;
 - Equipment certification;
 - Communications and information management;
 - Technology support; and
 - Continuous system improvement.

C. Overview

Program Overview

CSEPP is a joint Department of Homeland Security, (DHS) and DA program established to develop effective emergency response capabilities at each of the chemical agent stockpile locations. Both DHS and the Army have agreed that DHS will assume total authority, responsibility, and accountability for working with State, tribal, and local governments to develop their off-post emergency preparedness for responding to CAIs at the stockpile storage locations.

CSEPP uses Integrated Process Teams (IPTs), per P.L. 104-201, as a management tool that encourages early identification of problems and the development of joint solutions. Site IPTs exist in each of the stockpile communities and, while each operates slightly differently, all include the Army, DHS, and any tribal, State, and county representatives who work together to improve emergency preparedness, within the limitations of resources and jurisdictional authorities. Site IPTs often create Working IPTs (WIPTs) to address functional or technical issues more closely (e.g., public information or application of particular automated tools). Some of these are chartered for specific and limited purposes; others may be chartered to support ongoing areas of activity.

Functional, or National, IPTs are established as indicated by CSEPP community interest or concern, or as needed by CSEPP leadership, to study cross-site issues, develop solution options, and make recommendations for national operational or programmatic policy. All National IPTs undertake self-assessment and planning processes that yield an Annual Roadmap by the end of the first quarter of the Federal fiscal year (FY). These plans are then jointly reviewed, coordinated, and resourced by Army and DHS CSEPP leadership acting as an Integrating IPT (IIPT).

All new National IPTs receive formation training and technical assistance. The CSEPP Team Toolkit⁵ and *CSEPP's Teams: Best Practices and Lessons Learned*⁶ discuss National IPT best practices and lessons learned. Tailored, short-term training and technical assistance are also available to all IPTs, including Site IPTs, through the Army chain of command.

Document Overview

This document presents information that Army installation, State, tribal, and local emergency planners and officials need in preparing effective and comprehensive emergency response plans under CSEPP. Discussions of specific aspects of

⁵ Available online at

http://www.cseppportal.net/Secure/documents/IPTs_Workgroups/General/CSEPP_Toolkit.pdf

⁶ Kunz and Company, Inc. *CSEPP's Teams: Best Practices and Lessons Learned*. Prepared for the U.S. Army and FEMA Chemical Stockpile Emergency Preparedness Program. September 2004. Available online at

http://www.cseppportal.net/Secure/documents/IPTs_Workgroups/General/Team%20Study%20Report.pdf

emergency planning related to a chemical event in Chapters III through VI include lists of planning issues, as well as planning guidelines for selected issues in the appendices and referenced documents.

This document is organized based on the NIMS structure. However, because this document is designed to meet the needs of the CSEP Program, it does not conform precisely to the NIMS components as described in the [NIMS program document](#).⁷ While all NIMS components are addressed, some additional, CSEPP-specific items have been added in order that the resultant plans also conform to the CSEPP National Benchmarks.

The following discussion provides a synopsis of each major component of NIMS, as well as how these components work together as a system to provide the national framework for preparing for, preventing, responding to, and recovering from a CAI.

A more detailed discussion of each component is included in subsequent chapters of this document:

- Chapter II—Command and Management
NIMS-standard ICS is based on three key organizational systems:
 - ICS—defines the operating characteristics, interactive management components, and structure of incident management and emergency response organizations engaged throughout the life cycle of an incident.
 - Multiagency Coordination Systems—define the operating characteristics, interactive management components, and organizational structure of supporting incident management entities engaged at the Federal, State, local, tribal, and regional levels through mutual aid agreements (MAAs) and other assistance arrangements.
 - Public Information Systems—refer to processes, procedures, and systems for communicating timely and accurate information to the public during crisis or emergency situations.
- Chapter III—Preparedness
Effective incident management begins with a host of preparedness activities conducted on a “steady-state” basis, well in advance of any potential incident. Preparedness involves an integrated combination of planning, training, exercises, personnel qualification and certification standards, equipment acquisition and certification standards, and publication management processes and activities.
- Chapter IV—Resource Management
NIMS defines standardized mechanisms and establishes requirements for

⁷ Department of Homeland Security. *National Incident Management System*. 1 March 2004.

processes to describe, inventory, mobilize, dispatch, track, and recover resources over the life cycle of an incident.

- Chapter V—Communications and Information Management
NIMS identifies the requirement for a standardized framework for communications, information management (collection, analysis, and dissemination), and information sharing at all levels of incident management.
- Chapter VI—Supporting Technologies
Technology and technological systems provide supporting capabilities essential to implementing and continuously refining NIMS. These include voice and data communications systems, information management systems (i.e., record keeping and resource tracking), and data display systems. Also included are specialized technologies that facilitate ongoing operations and incident management activities in situations that call for unique technology-based capabilities.
- Chapter VII—Ongoing Management and Maintenance
This component establishes an activity to provide for routine review and the continuous refinement of EOPs and their components over the long term.

D. CSEPP Planning Guidance Review and Update

The DA, Office of the Deputy Assistant Secretary of the Army for Elimination of Chemical Weapons, and DHS, Preparedness Division are the primary Federal organizations for coordinating the ongoing management and maintenance of the *CSEPP Planning Guidance*. At the State, tribal, and local level, various preparedness organizations provide this multiagency coordination. Each organization reviews the document internally before finalization.

The *CSEPP Planning Guidance* will be reviewed regularly and revised every two years to incorporate new directives, legislative changes, and procedural changes needed based on lessons learned from exercises and actual events. Changes include additions of new or supplemental material and deletions. No proposed changes should contradict or override authorities or other guidance contained in statute or regulation unless otherwise stated.

As appropriate, significant issues and problems identified through a review of the planning guidance should provide the following information needed to allow the planning team to make the necessary revision(s):

- Review current program goals and CSEPP National Benchmarks.
- Review and capture current program practices and changes in the profession of emergency management since it was last updated.
- Review risk-based planning to focus resources for maximum increase in overall public safety.

- Review cooperative agreement reporting and work plans.
- Review and evaluate all training material used to prepare for exercise activity.
- Review the *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program (Blue Book)* and any changes to the CSEPP Exercise Program.⁸
- Review program closeout requirements.

Sources:

Department of Homeland Security. *National Incident Management System*. 1 March 2004.

Department of Homeland Security. *National Response Plan*. December 2004.

Federal Emergency Management Agency. *SLG 101: Guide for All-Hazard Emergency Operations Planning*. September 1996.

Federal Emergency Management Agency-Emergency Management Institute. *SI 235: Emergency Planning*. June 1997.

E. Procedures for Recommending Changes to the Planning Guidance

Any organizational level with assigned responsibilities under their EOP may propose a change to the *CSEPP Planning Guidance* and EOPs/Annexes.

Proposed changes to the *CSEPP Planning Guidance* will be submitted to the DHS, Preparedness Division for consideration, approval, and publication. The DHS, Preparedness Division is responsible for coordinating all proposed modifications to the *CSEPP Planning Guidance* with primary and support agencies, as required. The DHS, Office of Infrastructure Protection, Director of the Chemical and Nuclear Preparedness and Protection Division has the authority and responsibility for publishing revisions and modifications to *CSEPP Planning Guidance* documents, including supplementary standards, procedures, and other materials, in coordination with DA, Office of the Deputy Assistant Secretary of the Army for Elimination of Chemical Weapons, other Federal, State, local, tribal, and private entities with incident management and emergency responder responsibilities, expertise, and experience.

⁸ U.S. Department of the Army and DHS/FEMA. *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program (Blue Book)*. 7 Sept. 2004.

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Chapter II—Command and Management

NIMS-standard ICS is based on three key organizational systems:

- ICS—defines the operating characteristics, interactive management components, and structure of incident management and emergency response organizations engaged throughout the life cycle of an incident.
- Multiagency Coordination Systems—define the operating characteristics, interactive management components, and organizational structure of supporting incident management entities engaged at the Federal, State, local, tribal, and regional levels through MAAs and other assistance arrangements.
- Public Information Systems—refer to processes, procedures, and systems for communicating timely and accurate information to the public during crisis or emergency situations.

Together, these systems provide a framework that permits an orderly, flexible, scalable response to a wide variety of incidents and ensures consistent communications to the public throughout the duration of the response effort.

A. Incident Command System

NIMS provides that field command and management functions be performed in accordance with a standard set of ICS organizations, doctrines, and procedures. For incidents in which additional resources are required or are provided from different organizations within a single jurisdiction or outside the jurisdiction, ICS provides a flexible core mechanism for coordinated and collaborative incident management. When multiple local ICS organizations may be required, effective cross-jurisdictional coordination using processes and systems described in NIMS is critical.

An important aspect of ICS is to ensure all involved agencies understand their roles in a response; therefore, CSEPP plans should reference the response organization structure and be coordinated with all tasked agencies. Guidance on the specific requirements of NIMS ICS is found in the [NIMS document](#).⁹

B. Multiagency Coordination

CSEPP plans should address communication and coordination between multiple, separate emergency operations centers (EOCs) to form a multiagency coordination system. A description of multiagency coordination systems is found in the [NIMS document](#) on page 26.¹⁰

⁹ Department of Homeland Security. *National Incident Management System*. 1 March 2004.

¹⁰ Ibid.

In particular, due to the multijurisdictional nature of a CSEPP response, coordination should take place through implementation of a Unified Command (UC) system.

Unified Command

In incidents involving multiple jurisdictions, a single jurisdiction with multiagency involvement, or multiple jurisdictions with multiagency involvement, UC allows agencies with different legal, geographic, and functional authorities and responsibilities to work together effectively without affecting individual agency authority, responsibility, or accountability. UC would be essential to an effective response and recovery for a CSEPP incident affecting the off-post community. All agencies with jurisdictional authority or functional responsibility for CSEPP response, as well as those able to provide specific resource support, should participate in the UC structure to coordinate response, define roles of each jurisdiction and agency, and make optimum use of assigned resources.

Army/Department of Defense Command

The Army emergency response system provides Commanders with the organization and means to prepare for, respond to, and recover from a CAI. Through this system of personnel, facilities, and communications, Commanders are able to plan, coordinate, and direct CAIRA operations. The system extends through all echelons: from HQDA, Deputy Chief of Staff, G-3 to research, development, test, and evaluation laboratories and chemical storage and demilitarization facilities. At the installation level, the Commander establishes emergency response forces consistent with the CAI potential. In addition, when needed, the total resources of DoD are available to support CAIRA operations.

Federal Command—National Response Plan

The [NRP](#) is the main Federal disaster assistance plan. It is intended to provide “a complete spectrum of incident management activities to include the prevention of, preparedness for, response to, and recovery from terrorism, major natural disasters, and other major emergencies.”¹¹ It consolidates and replaces several former plans: the Federal Response Plan (FRP), U.S. Government Domestic Terrorism Concept of Operations Plan (CONPLAN), and Federal Radiological Emergency Response Plan (FRERP).

Federal authorities for the NRP include the Homeland Security Act, [HSPD-5](#), and the Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) to provide a comprehensive, all-hazards approach to domestic incident management. The Stafford Act authorizes DHS/FEMA, in conjunction with other agencies, to provide financial and other forms of assistance to individual households, State and local governments, and certain private nonprofit organizations following Presidentially-declared major disasters and emergencies.

¹¹ DHS. [National Response Plan](#). December 2004.

Such assistance can include housing and financial assistance for individuals, Small Business Administration (SBA) disaster loans, Farm Service Agency loans, unemployment assistance, legal services, food and food coupons, crisis counseling, and grants and loans to local communities to cover the costs of emergency response and replace lost tax revenue.

Federal Command—National Contingency Plan

Under the [National Contingency Plan \(NCP\)](#), Federal response efforts to mitigate and remediate hazardous substance accidents are led by the Federal On-Scene Coordinator (FOSC). For events that occur on military installations, the FOSC will be the Installation Commander (or designee) while the Initial Response Force (IRF) is operative, or a general officer in command of the Army's Service Response Force (SRF) if it is activated. The FOSC will coordinate and direct the environmental aspects of the emergency response, which will likely include the U.S. Environmental Protection Agency (EPA) and other Federal agencies. The FOSC is also a source of valuable support and information to the local emergency response community.

C. Public Information Systems

Public Information Systems address the processes, procedures, and systems for communicating timely and accurate information to the public and the news media during crisis or emergency situations.

Under ICS, the Public Information Officer (PIO) advises the Incident Command on all public information matters relating to the management of the incident. The PIO handles media and public inquiries, emergency public information and warnings, rumor monitoring and response, media monitoring, and other functions required to coordinate, clear with appropriate authorities, and disseminate accurate and timely information related to the incident, particularly regarding information on public health, safety, and protection. The PIO is also responsible for coordinating public information at or near the incident site and serving as the on-scene link to the Joint Information System (JIS) and the Joint Information Center (JIC).

During emergencies, the public may receive information from a variety of sources. The JIC provides a location for organizations participating in the management of an incident to work together to ensure that timely, accurate, easy-to-understand, and consistent information is disseminated to the public. The JIC is composed of representatives from each organization involved in the management of an incident. In large or complex incidents, particularly those involving medical and public health information requirements, JICs may be established at various levels of government. Those involved in disseminating emergency public information must communicate and coordinate with each other on an ongoing basis via the JIS.

Departments, agencies, organizations, or jurisdictions that contribute to joint information management do not lose their individual identities or responsibility for their own programs or policies. Rather, each entity contributes to the overall unified message.

D. Command and Management Planning Guidelines

Each CSEPP community jurisdiction should:

- Identify the official(s) authorized to activate the plan, activate the off-post EOC, and represent the jurisdiction in UC, and designate a chain of command for these activities.
- Assure plans address coordination between multiple EOCs, separate EOCs, and inter-EOC communication into a multiagency coordination system.
- Assure plans address the establishment of UC structure to aid in integrating Federal, State, tribal, and local jurisdiction leadership for effective allocation of resources and prioritization of response activities.

Chapter III—Preparedness

A. Emergency Planning Zones

The extent and type of emergency planning changes as the distance from the source of a potential release increases. Greater distance means that more time is available to implement protective actions. In addition, exposure also decreases with distance as the concentration of the agent becomes lower.

Recognizing that risk varies with distance from the source, emergency preparedness resources are concentrated on geographic areas close to the installation. Specific areas near the installation are defined to serve as the basis for planning public warning and instruction, evacuation, access control, and protection of special populations.

Two concentric zones are defined around each chemical installation. The inner zone is the immediate response zone (IRZ), and the outer zone is the protective action zone (PAZ). Figure 1 shows an example of an installation and its surrounding IRZ and PAZ.

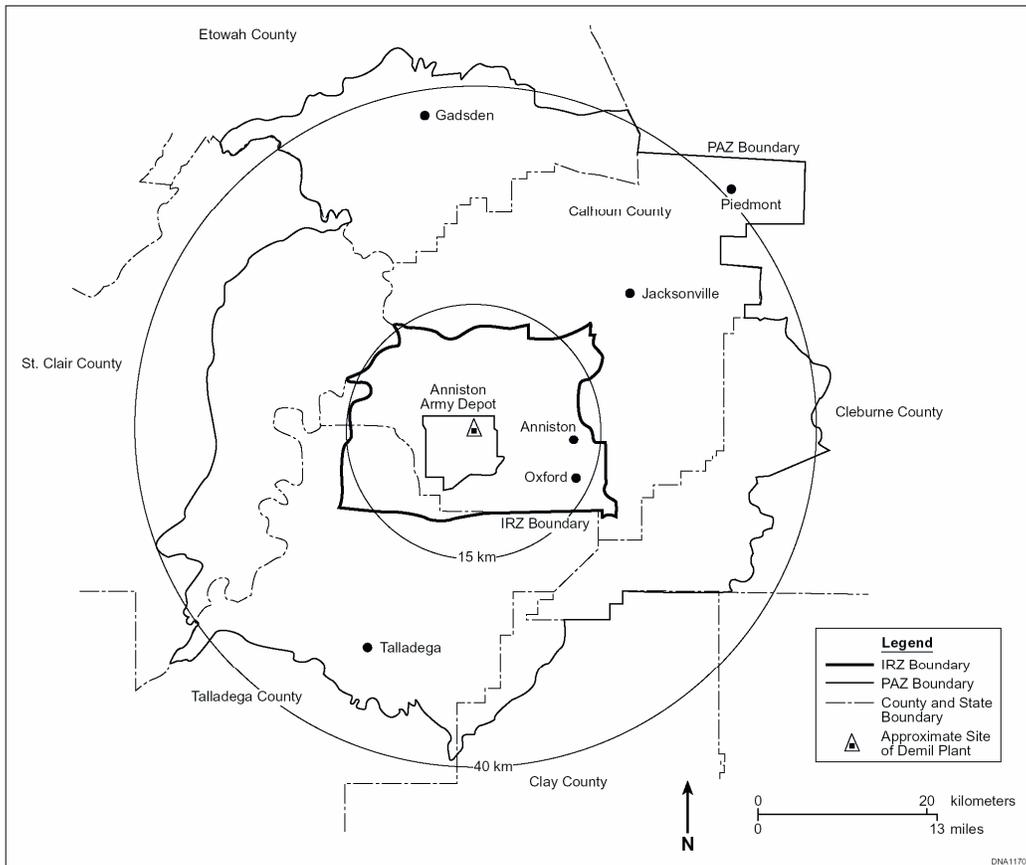


Figure 1: Anniston Army Depot IRZ and PAZ, county boundaries, and 15km and 40km radii

Emergency Planning Zone Size

The IRZ and PAZ have been defined for each CSEPP community. The IRZ encompasses an area requiring less than a one-hour response time when affected by an agent release under typical weather conditions. The IRZ extends to approximately 10 to 15 km (6 to 9 miles) from the potential chemical event source. The PAZ extends from the outer edge of the IRZ to approximately 15 to 50 km (roughly 10 to 30 miles) from the potential chemical event source, depending on the nature of the stockpile and other factors. The PAZ is that area where public protective actions may still be necessary in case of a release of chemical agent, but more time is expected to be available for implementation of protective actions.

The sizes of the IRZ and PAZ are based on judgments as to possible hazard scenarios, including how much chemical agent might be released and meteorological conditions that affect agent dispersal. The zone sizes also reflect the need for priorities in emergency preparedness. Since planning and preparedness resources are finite, they should be concentrated on areas where there is a reasonable possibility of hazard to the public.

Under unusual circumstances, it is possible that a chemical agent hazard would extend beyond the outer PAZ boundary. In such a case, the plans, resources, training, and procedures already in place for the IRZ and PAZ should allow emergency response authorities to respond effectively to the threat, particularly since relatively more time would be available before the hazard began to affect the more distant locations.

CSEPP planners should note that the IRZ includes the Army installation itself. The installation may have a significant population, including military personnel, civilian employees, military family members, visitors, and people associated with tenant activities on the installation. In the event that the protective actions must be taken, it is possible that people from the installation will evacuate or relocate off-post.

Emergency Planning Zone Configuration and Zones

Although the considerations described above give representative distances for the boundaries of the IRZ and PAZ, in general the actual boundaries have been set to accommodate local considerations. In some cases, the boundaries have been adjusted to account for local topographical features that may affect chemical agent dispersion. For example, a valley or hill may affect how a plume would propagate, so zone boundaries are extended in some places and shortened in others. At most locations, zone boundaries also have been adjusted to follow familiar landmarks and boundaries such as roads, rivers, and town or county boundaries. Following familiar landmarks and boundaries has several advantages:

- It simplifies planning for evacuation and access control. In particular, a zone based on roads and rivers can simplify the designation of evacuation

routes and placement of control points for traffic control and access to hazard areas.

- It helps to clarify educational and emergency information provided to the public. Emergency instructions to the public generally include three key elements: the geographical area to which the instruction applies; what to do (shelter or evacuate); and how or where to do it (instructions on implementing shelter, or specific evacuation routes). Defining zones according to familiar landmarks and boundaries allows the area to be described in terms that the public will recognize. For example, landmark information might include, “east of the river” or “south of the highway” within a particular town.

In addition to the IRZ and PAZ, most CSEPP communities also have designated zones that divide the IRZ and PAZ into smaller units. Figure 2 shows an example of an IRZ/PAZ divided into zones.

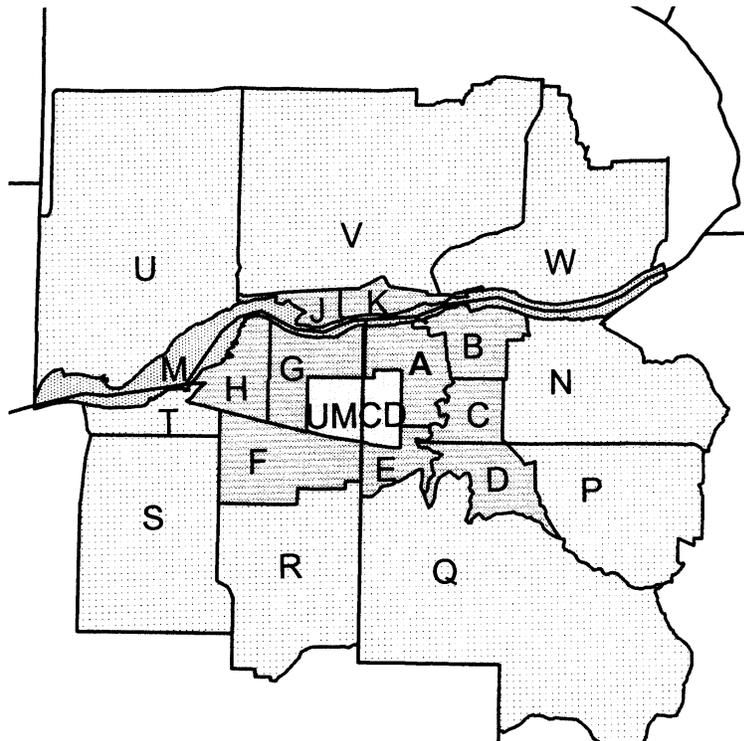


Figure 2: Umatilla IRZ (darker shading) and PAZ (lighter shading) divided into zones

The zones allow instructions to the public to be directed to the affected area based on conditions (e.g., wind direction) at the time of the accident. For example, in a situation requiring rapid evacuation, zones allow authorities to direct evacuation of the most endangered areas first, reducing traffic congestion and travel times. Similarly if sheltering in place (SIP) is called for, zones allow authorities to direct exit from shelter at the optimal time for each area to minimize harmful exposure.

It should be noted that, particularly close to the installation, smaller zones allow more precise protective action instructions to the affected population. The number of designated zones varies among the CSEPP sites.

As part of the CSEPP planning process, the IRZ, PAZ, and zone designations should be integrated into:

- Emergency public information messages;
- Public education materials distributed to residents and businesses; and
- Designation of evacuation routes and access control points (ACPs).

Adjustment of Emergency Planning Zones

Since the size of the IRZ and PAZ is based on assessments of the potential hazard, it may make sense to adjust their sizes when the hazard is reduced. For example, at a given site, elimination of a particular agent or a particular type of weapon or storage container might significantly reduce the potential hazard to the off-post community. It might then be possible to adjust the size of the IRZ and/or PAZ, perhaps by eliminating some zones. Changes in population, road networks, response effectiveness, or other factors also may affect the preferred size of the IRZ and PAZ.

If adjustments to planning zones are made, the changes should be integrated into public information and education materials after considering all the ramifications of the changes to evacuation routes, ACPs, shelters, other resource allocations, and the public's ability to digest and comprehend the changes.

B. Protective Action

A chemical event would trigger a sequence of actions both on the installation and in the surrounding communities. When protective actions are needed, installation authorities will initiate on-post notification to protect persons located on the installation, and also notify off-post warning points and provide a protective action recommendation (PAR) for affected zones. Off-post authorities are responsible for making a protective action decision (PAD) and alerting and notifying the public in affected zones; however, some of these actions may be delegated to installation responders per local agreements. The process of developing and implementing protective actions should be carefully planned so that it may be executed quickly and effectively in an emergency.

This section describes protective action options for CSEPP, including evacuation and SIP, and planning considerations for choosing and implementing protective actions in an emergency. It includes discussion of the following topics:

- Principles of Protective Action
- Protective Action Decision Making
- Protective Action Options

- Protective Action Implementation
- Special Populations
- Access Control
- Reception and Care of Evacuees
- Provision for Evacuees' Pets

Principles of Protective Action

Protective actions are activities that a population at risk engages in to obtain the best outcome in the event of an accident or incident involving chemical warfare agents at Army chemical storage sites. The best outcome is when there are minimum fatalities for the conditions and circumstances, due to timely and appropriate actions taken by Army and off-post officials, emergency workers, and the population at risk. Another desirable outcome is minimum harm to chemical workers and the environment without additional risk of fatalities in the affected community.

Protective actions are expected to provide the best outcomes if they are derived from a balanced protective action strategy that is embedded in plans, agreements, training, exercises, public education, and emergency response throughout the CSEPP community, and if the response is managed by the NIMS-standard ICS.

A balanced protective action strategy consists of an appropriate mix of immediate evacuation and temporary SIP, with appropriate follow-on actions to end SIP at the best time and in the best way to minimize fatalities. Initial recommendations, decisions, and directions to take a specific protective action in particular zones will be based on previously agreed upon assumptions, and chemical plume modeling and related calculations. While these initial recommendations, decisions, and directions might be based on incomplete information, the alternative of waiting for complete information (e.g., definitive monitoring results) will almost certainly jeopardize a good outcome. Subsequent recommendations, decisions, and directions to modify initial protective actions (e.g., evacuate a larger area or end SIP in a specific area) need to be developed and promulgated as thoughtfully and quickly as initial protective actions. A balanced protective action strategy also assumes that some percentage of a population at risk will act contrary to direction, and that special populations might need special consideration. These concerns need to be addressed in plans and agreements, and taken into account as the response evolves.

Management by the NIMS-standard ICS is essential to the success of the response, given the many jurisdictions potentially involved in every Community Emergency and the likely requirement for still other jurisdictions to provide essential augmentation response and assistance (see Chapter II—Command and Management).

Protective Action Decision Making

Responsibility for Decision Making

When a chemical event occurs, protective action decisions (PADs) must be made for persons on the installation and for the surrounding off-post community. The Installation Commander has the responsibility and authority for initial chemical event response on-post; for the protection of on-post personnel; and for mitigation of the event's consequences.¹² The Installation Commander is also responsible for providing appropriate protective action recommendations (PARs) to the off-post community. PARs should be situation-specific and should be updated as the situation warrants. PARs should include recommendations to end SIP at the appropriate time.

Under State law, State and local officials are responsible for deciding on protective actions for the off-post CSEPP community. Some off-post officials have chosen to delegate authority for initial off-post PADs to installation personnel when a quick decision is needed to save lives.

Time Available for Decisions

A reasonable PAR or PAD that is issued quickly based on the pre-approved criteria of the Protective Action Strategy Plan (PASP) and current community conditions is better than a "perfect" PAR/PAD that is issued too late to be effective. Any delay in making PADs can occur at the expense of fatalities in areas closest to the storage site.¹³ Detailed guidance on the timing of making PADs and alert and notification may be found in Chapter V, Section A: Alert and Notification in this guide.

Coordination of Decision Making

Because of the limited time available to make this complex decision during an emergency, it is important that this function be carefully planned. It should be anticipated that there will be very little time for staff activation, consideration, discussion, coordination, or confirmation of circumstances before a decision must be made and implemented. Plans should include a method for quickly determining the preferred protective action(s), and the area(s) to which they apply, based on information that is expected to be available minutes after the event.

The decision process should be documented in an MOU that includes all relevant organizations. The MOU should indicate who will make PADs and how they will be communicated to the public, including the circumstances, if any, under which the Army installation will initiate activation of public alert and notification systems (see Chapter V, Section A: Alert and Notification).

¹² Headquarters, Department of the Army. *DA Pamphlet 50-6: Chemical Accident and Incident Response and Assistance (CAIRA) Operations*. Washington, D.C.: HQDA, 26 March 2003. Chapt. 3-2.c.

¹³ CSEPP Shelter-in-Place Work Group. *Report of the Shelter-in-Place Work Group*. Sec. 2.2.1. 3 December 2001.

In order to be prepared for the possibility of a chemical event, at least once per day the Army installation develops a hazard estimate based on the maximum credible event (MCE) for storage operations, or emergency response planning scenario (ERPS) for demilitarization operations. The MCE/ERPS is based on the particular activities taking place at the installation that day involving chemical weapons. The MCE/ERPS, along with meteorological data, may be input to D2-Puff to develop a provisional PAR. The MCE/ERPS and provisional PAR may change during the day, for example if there is a change in planned operations or a significant change in meteorological conditions.

It is recommended that the Army installation and off-post authorities develop an MOU under which the installation provides daily workplan information, including the MCE/ERPS, to the appropriate points of contact (POCs) off-post.¹⁴ Similarly, the off-post authorities should provide daily information to the installation EOC regarding road closures or other conditions that might affect emergency response for the installation

Determining the Appropriate Protective Action

A balanced PASP that includes provision for populations evacuating and SIP should be incorporated into CSEPP plans. Detailed guidance for developing a balanced PASP may be found in the [Report of the Shelter-in-Place Work Group](#)¹⁵ and the [Shelter-in-Place Protective Action Guidebook](#).¹⁶ Chemical plume modeling should be used to estimate the hazard for PAD-making purposes.¹⁷ Additional information on protective action options and implementation of protective actions follows this section.

When a chemical event occurs, preferred protective actions for each affected zone should be chosen based on the following factors, as applicable:

- Projected areas affected by each Acute Exposure Guideline Level (AEGL) threshold;
- When the hazard is projected to reach each affected zone;
- How long it will take to implement protective actions, including evacuation time estimates, and time needed to implement SIP, as applicable;

¹⁴ A provisional PAR may be provided also; however, if a chemical event occurs, a new PAR must be provided based on updated information. The new PAR would likely differ from the provisional PAR since the updated source term, location, and meteorological information would not likely match the information on which the provisional PAR was based.

¹⁵ CSEPP Shelter-in-Place Work Group. [Report of the Shelter-in-Place Work Group](#). 3 December 2001.

¹⁶ CSEPP Protective Action Integrated Process Team. [Shelter-in-Place Protective Action Guidebook](#), ver. 5.6. 31 October, 2005.

¹⁷ “Off-post authorities should depend mainly on air dispersion modeling to determine plume passage and when to recommend ventilation and/or egress from shelter-in-place.” ([The Chemical Stockpile Emergency Preparedness Program Off-post Monitoring Integrated Product Team Report](#). p. 23. January 1999.)

- The degree of protection offered by local housing stock and other populated structures;
- The current traffic situation (e.g., inclement weather or road closures that might impede evacuation); and
- The identity of the chemical agent involved.

Planning for PAD development should also consider the following points:

- A SIP PAD must always include provision for terminating SIP. In essence, SIP is a two-part decision that is not complete until the “terminate SIP” recommendation is made, and a terminate SIP instruction is broadcast.
- Even when a decision is made to evacuate a particular zone, there will always be some individuals who cannot or will not evacuate. SIP and terminate SIP recommendations should always be prepared for those who, for whatever reason, did not evacuate. Conversely, a SIP PAD will inevitably result in some individuals who choose to evacuate. Planners should consider these individuals, and should make the necessary accommodations for evacuees, even in instances where evacuation is not recommended.

Protective Action Options

Evacuation

Evacuation involves the movement of individuals from an area of actual or potential hazard to a safe area. It can be the most effective of all protective actions provided it is completed before the arrival of the toxic plume. Evacuation may be precautionary or responsive in nature. A precautionary evacuation refers to an evacuation implemented when the decision maker has information indicating an increased potential for a release of toxic material, but there is no indication of a current release. A responsive evacuation, in contrast, refers to an evacuation implemented in reaction to a release.

Both types of evacuation entail similar planning tasks: estimating the number of potential evacuees, with particular emphasis on special populations; identifying the most appropriate evacuation routes; designating needed traffic control; estimating the time needed for evacuation; and anticipating potential problems. These tasks must be well coordinated with all other emergency functions described in this document.

Shelter-in-Place

SIP is accomplished by shielding the public from a hazard. Shelters may be congregate (for many people) or individualized (a home). Shelters may be existing structures, with or without upgraded protective measures, or facilities specifically designed to provide shelter from toxic chemicals.

In CSEPP there are four types of SIP—normal, expedient, enhanced, and pressurized:

- Normal SIP involves taking cover in a building, closing all doors and windows, and turning off ventilation systems. Effectiveness is improved by going into an interior room. The shelter should be ventilated or exited to avoid continued exposure to infiltrated vapors when vapor concentrations are lower outside than inside.
- Expedient SIP is similar to normal SIP except that, after going into the room selected as a shelter, the inhabitants take measures to reduce air infiltration into the room. Such measures could include using duct tape, plastic sheeting, or other simple means to seal around doors, windows, and vents. As with normal SIP, the shelter should be ventilated or exited when vapor concentrations are lower outside than inside.
- Enhanced SIP refers to taking shelter in a structure to which weatherization techniques have been applied before the emergency to permanently reduce the air infiltration rate. Effectiveness is improved by going into an interior room. As with normal and expedient SIP, the shelter should be ventilated or exited when vapor concentrations are lower outside than inside.
- Pressurized SIP refers to taking shelter in a structure (or a room in a structure) where air infiltration is effectively prevented by creating a positive pressure within the occupied space. Positive pressure may be created by drawing outside air into the shelter through a filter that removes chemical agent. This creates a positive pressure in the shelter so that clean air is leaking out instead of contaminated air leaking in.

More detailed guidance on implementation of normal, expedient, enhanced, and pressurized SIP is found in *Report of the Shelter-in-Place Work Group*¹⁸ and the *Shelter-in-Place Protective Action Guidebook*.¹⁹ Specific guidance on the design and construction of pressurized SIP is found in Recommendations to Appendix E, Planning Guidelines for Protective Actions and Responses for the Chemical Stockpile Emergency Preparedness Program, Section E.4, December 17, 2001. The following considerations apply to all types of SIP:

- Except for pressurized shelters, SIP is a temporary measure. For maximum effectiveness, it is important to exit the shelter at the appropriate time. More time is available for pressurized shelter where infiltration is not a concern; however, people cannot remain within a pressurized shelter indefinitely.
- Persons within the shelter must have a means to receive further emergency instructions, such as a radio.

¹⁸ CSEPP Shelter-in-Place Work Group. *Report of the Shelter-in-Place Work Group*. 3 December 2001.

¹⁹ CSEPP Protective Action Integrated Process Team. *Shelter-in-Place Protective Action Guidebook*, ver. 5.6. 31 October, 2005.

- The effectiveness of SIP as a protective action will also be affected by what is done after terminating SIP. Options include relocation, staying in place outside the shelter, or ventilating the shelter while remaining inside. After exiting shelter, it may be appropriate to offer persons who were sheltered a medical screening to check for symptoms of agent exposure.

Protective Action Implementation

Evacuation

Plans and procedures for implementing evacuation should include the following:

- Time estimates for evacuating portions of the IRZ and PAZ.
- Designated evacuation routes associated with each zone.
- Public instructions developed for each zone, including designated evacuation routes, reception center locations, and brief instructions on what to take along. Instructions should be consistent with public education materials.
- Provision for law enforcement personnel to assist with traffic management. Traffic control points (TCPs) should be identified at key intersections along evacuation routes.
- Designated evacuee reception locations. Reception centers should be set up for evacuees or persons relocating after shelter. Guidance on setup, staffing, and services provided at reception centers may be found in the Reception Center Functions Section of this document.
- Provision for special populations. See the subsection below on Special Populations.
- Provision for measures to help people who, for whatever reason, did not evacuate after the recommendation was given.
- Provision for companion animals.

Shelter-in-Place

Plans and procedures for implementing SIP should include:

- Public instructions, which are consistent with public education materials that have been distributed, and cover the following points:
 - The importance of prompt compliance;
 - Brief instructions for expedient shelter;
 - Reference to public education materials that have been distributed;
 - Use of sheltering kits, if they have been distributed; and
 - The importance of having a radio to receive exit-shelter instructions.

- Control of access to the sheltered area. ACPs should be identified along with resources (e.g., staff and barricades) to implement control.

Instructions should also take into consideration transient populations in the area at the time of the event. There may be considerable numbers of persons who lack exposure to prior public education efforts.

Planning for implementation of SIP should also include provisions for relocation after termination of SIP. Relocation implementation measures are similar to those for evacuation and should include designated routes, reception centers, traffic management, provision for special populations, and provisions for companion animals.

Maintaining Shelter-in-Place

The expected time to remain in shelter is likely to be brief (one-half to four hours); therefore, for most individuals, there should be no need to collect supplies, such as medications, prior to sheltering. Once established, the integrity of the shelter should be maintained to protect against air infiltration. It is permissible to briefly open an entry to the shelter to allow someone to enter after the shelter integrity is established, if the alternative is to deny shelter to someone in need. It is unlikely that this will significantly decrease the protective value of the shelter. Occupants should not leave the shelter (or the room within the shelter that provides for the least air infiltration) for any reason other than an immediate life-threatening medical emergency, until instructed to do so.

A device to monitor emergency alert system (EAS) or tone alert radio (TAR) broadcasts is essential in the shelter. In addition, a cell phone or cordless phone might be useful in the shelter. To avoid overload of local telephone services, the telephone should not be used while in a shelter, except for a dire medical emergency or to report clear symptoms of nerve agent exposure. Local plans and public education materials should cover who to call in the event of a medical emergency while sheltered, and what range of responses are likely.

The public education program should include the above information on maintaining shelter.

Ending Shelter-in-Place—Timing

Ending SIP at the appropriate time is key to its protective effect. For each zone where the public has been instructed to take a protective action, the Army installation should provide a timely recommendation to exit shelter. Exit-shelter recommendations should be based on chemical plume modeling to estimate hazard levels at downwind locations. The model should have the following characteristics:

- It should be based on when the plume concentration outside becomes less than inside shelters.

- Consider the dose-response relationship that is most relevant to the effects of the agent on a sheltered population.
- Consider exposure before, during, and after SIP.
- Provide information to minimize fatalities.

In addition, it should be noted that the timing for ending SIP is most crucial for areas close to the source of the release, where dangerous concentrations are more likely to be encountered. The procedure for ending SIP should be able to distinguish between close-in areas and areas further away from the release source.

Ending Shelter-in-Place—Method

Recommendations on how to end SIP will depend on several variables.

Ventilation of the shelter is important if the shelter is within the hazard wedge or risk envelope, and the occupants are going to remain inside because they cannot exit. If they are going to exit or relocate, ventilation is not that important, and the additional time involved might result in additional harmful exposure in the process. In addition, some people might be reluctant to leave their homes unsecured and delay their exit and relocation while they secure their valuables, or collect their valuables to take with them. Below are options for how to end SIP:

- Resume normal activities with no restrictions. Resuming normal activity with no restrictions would be an appropriate action for persons who were never in danger, but who were sheltered as a precaution. This is the usual interpretation of “all clear.”
- Ventilate the shelter but remain indoors. In some cases the best action to end SIP might be to remain indoors but ventilate the building by opening doors and windows, removing tape and plastic installed during expedient sheltering, and turning on ventilation equipment. This might be the only option for disabled persons or special populations who lack the mobility to exit the shelter. This option also might apply when the weather is so dangerous that remaining outside for an extended period is inadvisable or when there is believed to be some other hazard outdoors to be avoided.
- Exit the shelter and remain nearby. In order to decrease the overall exposure, it might be appropriate to instruct the public not to take the time to open windows, remove tape, and turn on ventilation equipment prior to leaving the building. Rather, they should simply go outside and let the building ventilate itself gradually. The potential for aerosol deposition (creating a contact hazard) should be a minor consideration, since it is such a remote possibility and not likely to be a safety factor at great distances from the source, even if an agent aerosol is generated by the event. This might also be the best option for persons who lack transportation to relocate.
- Relocate to a designated facility. Local officials may direct that upon the termination of SIP, sheltered populations should relocate to designated facilities to be accounted for and medically screened for agent exposure

symptoms. In that case, the instructions would be to exit from shelters and proceed immediately to a place where this follow-up can occur. Instructions should identify the routes to take to avoid encountering the plume again and traffic bottlenecks. Designated routes and facilities for relocation might not be the same as for an initial evacuation. In dire circumstances, such as if the duration of the release is longer than originally expected and SIP is no longer a good choice, sheltered persons might be asked to relocate immediately to a safer place.

Collective Protection or Overpressurization

Where pressurized shelters have been developed, protective action procedures should ensure that separate instructions are issued for persons in those shelters. Persons in pressurized shelters are not subject to the same time constraints as those in unpressurized shelters; the protective properties of the shelter will continue for a longer period than in an unpressurized shelter.

Special Populations

An emergency response program should provide for individuals and groups both in and out of institutions who require special consideration in emergencies. These special populations include, but are not limited to: the sensory, mobility or mentally impaired; unattended children; children in preschool facilities; school students; hospital patients; nursing home residents; individuals in correctional facilities; individuals living at home with special equipment needs due to medical conditions; chronically ill persons particularly susceptible to agent exposure; people who do not own or have access to an automobile; residents of private care or convalescent homes; and persons who do not speak English.

Maintaining Contact Information

In order to provide assistance to special populations, it is necessary to maintain information about their locations and needs. The plan should include lists of special facilities, with contact information, and mechanisms for updating the list (e.g., by contacting the agencies that license them). Planners should also make an effort to collect and maintain information on special needs individuals not in special facilities, including contact information and the nature of their special needs, through self-identification. Mechanisms to obtain such information are:

- Having tear-off notification cards in public education materials; and
- Working with welfare or social service agencies, religious, fraternal, social, and service organizations, and volunteer and nonprofit groups at the State, tribal, county, and community levels. While the need for confidentiality generally prevents such agencies from providing direct information, they may be willing to provide questionnaires, referral information, and assistance to their clients who can then identify themselves to planners.

Information about special needs individuals and the arrangements made on their behalf must be protected from public disclosure; it should be available to emergency responders but limited to those with a need to know. Planning should also include mechanisms for updating this information, at least annually.

Assistance to Special Populations

Plans should include measures designed to protect special populations as appropriate, based on their needs, protective actions that may be required, and available resources for assistance. Planners should consider the following with respect to special populations:

- Assistance or special equipment for notification. Persons with sight or hearing impairments may need special equipment (such as Telecommunications Devices for the Deaf [TDDs]) in order to receive alert and notification.
- Provision of educational materials and emergency instructions in languages other than English. Education materials and emergency information should be translated into a foreign language if the state determines through survey or other means that one percent or more of the population at risk speaks that language but does not speak English.²⁰
- Special equipment may be needed for alert and notification of special facilities. For example, it may be appropriate to provide TARs to special facilities, even where they are not provided to the public generally.
- Separate PADs may be appropriate for special populations. In some cases, for example, for facilities or individuals where evacuation would be difficult, time-consuming, or dangerous, it may be appropriate to plan for recommending SIP for those facilities or persons, even though the general public is recommended to evacuate. Where protective action options are limited, it may also be appropriate to consider providing for enhanced or pressurized shelter.
- Assistance with carrying out protective actions may be required. If resources are available, either through emergency response agencies or from volunteers, arrange for assistance to special needs individuals for implementing protective actions (e.g., rides for evacuation or help with carrying out SIP).
- Host facilities should be identified for special facilities. Where special facilities may be evacuated, host facilities outside the PAZ should be identified that can accommodate the special needs of the evacuated facilities' occupants.

²⁰ For example, suppose 5% of the at-risk population does not speak English, and of them, 4.5% speak Spanish as their primary language and .5% speak Tagalog. Under this guidance, educational materials and emergency information should be translated into Spanish. Of course, translation into Tagalog would also be beneficial if time and resources permit.

Schools and daycare centers for children are a distinctive type of special facility. Measures to protect children in such facilities should be carefully planned and well publicized. In particular, special attention should be given to informing parents about arrangements for the protection of children. Major safety problems could occur if parents attempt to pick up their children at schools during an evacuation. Parents need to be confident that their children are being cared for and know where the children can be found after the evacuation. Such information should be included in public education materials and in emergency instruction messages (e.g., EAS messages).

Planning for special populations should solicit and incorporate input from people with different types of disabilities. More specific guidance and information pertaining to emergency preparedness for special populations may be found in the following sources:

- *An ADA Guide for Local Governments: Making Community Emergency Preparedness and Response Programs Accessible to People with Disabilities*²¹
- *Emergency Preparedness Initiative: Guide on the Special Needs of People with Disabilities for Emergency Managers, Planners & Responders*²²
- *Emergency Procedures for Employees with Disabilities in Office Occupancies*²³

Access Control

ACPs and TCPs should be designated ahead of time based on the predesignated planning zones. However, instructions to evacuate should not be delayed pending the establishment of ACPs and TCPs. Staffing and equipment to set up and maintain ACPs and TCPs should be identified in the plan and procedures.

Reception and Care of Evacuees

Persons advised to evacuate (or to shelter in place and then relocate) should be advised to proceed along designated routes to locations where they can receive further emergency services, including reception and mass care. Reception, as used in this guide, refers to a process in which evacuees receive a very quick evaluation for medical needs, are referred for further medical care if needed, and are offered further information and assistance such as registration, decontamination, and mass care. A reception center, as used in this guide, refers

²¹ U.S. Department of Justice, Civil Rights Division, Disability Rights Section. *An ADA Guide for Local Governments: Making Community Emergency Preparedness and Response Programs Accessible to People with Disabilities*. 30 Sept. 2004. Available online at www.usdoj.gov/crt/ada/emergencyprep.htm.

²² National Organization on Disability. *Emergency Preparedness Initiative: Guide on the Special Needs of People with Disabilities for Emergency Managers, Planners & Responders*. Available online at www.nod.org/emergency.

²³ FEMA, U.S. Fire Administration. *Emergency Procedures for Employees with Disabilities in Office Occupancies* (FA-154). Available online at <http://www.usfa.fema.gov/downloads/pdf/publications/fa-154.pdf>.

to a location where reception functions are performed. A reception center can be at a facility or at a TCP. Mass care, as used in this guide, refers to providing shelter, food, and other services in a temporary residential setting. Reception and mass care functions may be co-located or performed at separate locations.

Reception Center Functions

Reception centers should be located as close as possible to the area affected by the emergency. The farther away they are, the longer it takes to get there, which may be detrimental to evacuees who need help (e.g., those suffering effects of agent exposure). Reception centers should be located where large flows of traffic can be handled quickly and efficiently. Reception center staffing should include law enforcement personnel for security and traffic management.

Upon arrival at the reception center, evacuees should be quickly evaluated for signs of agent exposure or other medical distress. Speed is essential for this process since there may be a few people with potentially serious medical problems among a very large number of relatively unaffected people. The reception center should be designed and staffed to promote this quick evaluation.²⁴

Evacuees showing symptoms of agent exposure should be offered immediate dry decontamination and referred for further medical treatment, which might include complete personal decontamination. Dry decontamination, as used in this guide, refers to removing the outer layer of clothing, washing exposed skin and hair with soap and water, and providing a suitable replacement for outer clothing. Complete personal decontamination refers to washing the entire body with soap and water and a complete change of clothing.

Evacuees showing other signs of distress (not apparently agent exposure related) should also be referred for further medical treatment. Preferably there should be emergency medical technicians (EMTs) and at least a dry decontamination capability at the reception center.

Evacuees who do not need immediate medical attention should be offered the following services:

- Registration to establish that they arrived at the reception center, account for their personal safety, and allow for reuniting families who have been separated;
- Mass care for those who need a place to stay; and
- Decontamination (at least dry decontamination).

²⁴ For example, an EMT-trained “greeter” might perform a quick visual exam of incoming evacuees, and ask them a few questions, such as where they came from, when they left, whether they were sheltered-in-place first, and whether they are experiencing a short list of agent symptoms (e.g., dim vision or headaches).

To the extent that these services are provided at the reception center, the reception center should be arranged and managed so that evacuees waiting for these services do not cause a bottleneck that slows down the medical screening process for subsequent arrivals.

Mass Care Functions

Based on past evacuations from various natural and technological emergencies, generally about 15 to 30% of evacuees receive assistance at mass care centers. Mass care centers are typically operated by the American Red Cross (ARC) pursuant to national and local agreements. ARC has established guidelines for selecting facilities for use as mass care centers, and has procedures and training on how to operate them.²⁵ Facilities to be used for mass care should be predesignated and generally should be located outside the PAZ.

ARC activities in the mass care centers must be coordinated with other emergency response functions. Therefore it is desirable to have an ARC liaison at one or more off-post EOCs to handle inquiries about missing persons, track the number of persons at mass care centers, and coordinate with other response organizations. Mass care centers may need support from local jurisdictions for law enforcement, traffic management, transportation, medical care, and other functions.

Provision for Evacuees' Pets

Current DHS/FEMA general guidance for disasters states that, "if you must evacuate your home, always take your pets with you."²⁶ Emergency planners should consider the presence of companion animals in every aspect of screening, decontamination, victim care, and evacuee support. Plans should include animal control agencies (public and private) and make full use of public and private facilities for animal sheltering. Agreements with private businesses will facilitate sheltering of animals or those with animals.

Most communities rely on ARC shelters for evacuee support. ARC shelters do not accept animals other than service animals. Emergency planners should explore additional options, such as agreements with veterinary colleges or commercial animal-related businesses to satisfy animal care and sheltering needs.

C. Re-entry and Recovery

CSEPP plans should include provision for re-entry and recovery following a chemical event. Much will depend on the details of the event. For example, the agent released (if any), amount, and weather will affect the potential for residual hazard; the affected area, time of year, and other factors will affect the amount and type of resources that will be needed to assess the hazard and manage the recovery. However, at least some organizational steps should be taken in advance in order to expedite implementation of the re-entry and recovery process.

²⁵ In accordance with American Red Cross Disaster Services, 3000 Series documents.

²⁶ FEMA. *Pets and Disasters*. February 2003. Available online at <http://www.fema.gov/library/petsf.shtm>.

The *CSEPP Recovery Plan Workbook* is designed for use by CSEPP communities and provides a template for recovery planning.²⁷ The *Workbook* template includes a basic recovery plan and covers recovery hazard assessment and decision making; management of access to restricted areas; protection of food and water; medical and social services; relocation of residents; public information; claims and disaster assistance; and environmental remediation. The *Workbook* also provides background, explanatory, and reference materials to aid planners. The *Workbook* is available as a Word file or as part of a recovery planning software package.

This guide provides general background information on the relationship between emergency response and recovery; considerations for recovery planning; recovery plan format, and resources for recovery planning.

Relationship between Emergency Response and Recovery

Emergency response and recovery have the same overall goal—protecting public health and safety and the environment. Although it is sometimes convenient to refer to emergency-phase activities and recovery-phase activities, there is no sharp boundary between the two phases. Activities to support re-entry and recovery begin as soon as possible after a chemical event, as information is gathered to analyze the hazard and resources are activated to support the affected population. The term “recovery” includes measures to assess the hazard and perform other urgent tasks in the area affected by the emergency; a controlled process for re-entry, restoration, and remediation; and provision of services to persons, businesses and other organizations affected by the emergency.

Considerations for Recovery Planning

A chemical event may or may not involve a release of chemical agent, and where there is a release, it may or may not be enough to be detectable or pose a hazard off-post. A recovery process should be considered for any chemical event in which the public is notified of a chemical emergency. CSEPP recovery planning should cover the full range of chemical events ranging from purely precautionary notices to severe events involving significant hazards off-post.

General Assumptions

The following assumptions apply to any chemical stockpile emergency where the off-post community is involved, whether or not any actual release of chemical agent is confirmed.

- If any area has been evacuated or access to it restricted, there will be pressure to re-open it so that people may return to their homes and businesses;

²⁷ Argonne National Laboratory. *CSEPP Recovery Plan Workbook*. December 2002.

- Once protective actions of any kind have been issued, the population near the facility will want reassurance that the area is safe;
- Recovering from the medical, social, psychological, and economic impacts of the event may take longer than the physical process of recovery; and
- Recovery operations and decisions will be subject to intense scrutiny from news media and from elected officials at the State and Federal level.

Assumptions for Particularly Severe Events

For severe events where there is a significant release of chemical agent and a possibility that it was transported off-post, it can be anticipated that there will be uncertainty as to the nature and extent of any residual hazard. Protective actions will likely have been initiated based on assumptions as to the amount of agent released (e.g., MCE) combined with computer modeling of its dispersal. The process of determining whether there is any residual hazard will likely take a few days to a few weeks.

In such an event, off-post officials would have a number of concerns relating to monitoring, sampling, hazard assessment, and protective actions during the recovery period, specifically including concerns for:

- **Residual agent vapor.** It is possible, though unlikely, that residual agent vapor might linger for significant periods in indoor areas and outdoor low-lying areas, or be adsorbed onto materials and reemitted.
- **Aerosol deposition.** Under some circumstances, it is possible that chemical agent would be dispersed as an aerosol (very small droplets) and subsequently deposited as contamination on downwind surfaces off-post.
- **Unprotected persons remaining in the restricted area.** It is likely that some persons will have remained in the area at risk regardless of the protective action instructions they were given.
- **Special populations.** Where applicable, special populations might need outside assistance to resolve health and safety issues at their location before they are free to exit the shelter.
- **Additional releases.** In some scenarios there may be a slight possibility for additional releases over time, for example as damaged munitions are being handled as part of the site clean-up.
- **Secondary hazards caused by the chemical event.** For example, rapid evacuation of the population might leave some industrial facilities or critical infrastructures vulnerable to loss or damage that, in turn, could pose a health and safety threat.
- **Other hazards not caused by the chemical event.** Disasters such as earthquakes or tornadoes might cause or contribute to a chemical event,

create separate response requirements, and complicate the chemical event response.

- **Persons who evacuated from areas that were not at risk.** Because of the conservative assumptions that are built in to the PAD making process, it is likely that many people will have evacuated from areas that were never dangerous. This population will strain resources to provide care and shelter for evacuees until they return home.

Federal Assistance during Recovery

During the recovery period, the Army, DHS, and other Federal agencies will provide leadership and resources under the [NCP](#) and [NRP](#).

Under the [NCP](#), the Army will lead efforts to clean up and mitigate hazards at the CAI site, remediate environmental damage, and determine whether there is any residual hazard. These efforts will be coordinated by the FOSC. The FOSC will be the Installation Commander (or designee) while the IRF is operative. If the SRF is activated, the FOSC position may transfer to the general officer in charge of the SRF.

Under the [NRP](#), Federal disaster response efforts are coordinated by the President, the Secretary of Homeland Security, DHS and other Federal agencies as needed. The NRP is the core plan for managing domestic incidents. A basic premise of the NRP is that incidents are generally handled at the lowest jurisdictional level possible.

During actual or potential Incidents of National Significance, the overall coordination of Federal incident management activities is executed through the Secretary of Homeland Security. Other Federal departments and agencies carry out their incident management and emergency response authorities and responsibilities within this overarching coordinating framework.²⁸ An Incident of National Significance is an actual or potential high-impact event that requires a coordinated and effective response by an appropriate combination of Federal, State, local, tribal, nongovernmental, and/or private-sector entities in order to save lives and minimize damage, and provide the basis for long-term community recovery and mitigation activities.²⁹

For terrorist incidents, the primary responsibilities for coordinating and conducting Federal law enforcement and criminal investigation activities are executed by the Attorney General acting through the Federal Bureau of Investigation (FBI).³⁰

²⁸ DHS. *National Response Plan*. December 2004. p. 15

²⁹ Ibid. p. 67 (definitions)

³⁰ Ibid. p. 16

Pursuant to [HSPD-5](#), the Secretary of Homeland Security is responsible for coordinating Federal operations within the United States to prevent, prepare for, respond to, and recover from terrorist attacks, major disasters, and other emergencies.³¹ HSPD-5 further designates the Secretary of Homeland Security as the “principal Federal official” (PFO) for domestic incident management.

In this role, the Secretary is also responsible for coordinating Federal resources utilized in response to or recovery from terrorist attacks, major disasters, or other emergencies if and when any of the following four conditions applies:

- A Federal department or agency acting under its own authority has requested DHS assistance;
- The resources of State and local authorities are overwhelmed and Federal assistance has been requested;
- More than one Federal department or agency has become substantially involved in responding to the incident; or
- The Secretary has been directed to assume incident management responsibilities by the President.³²

In a major disaster or emergency as defined in the Stafford Act, the President “may direct any Federal agency, with or without reimbursement, to utilize its authorities and the resources granted to it under Federal law (including personnel, equipment, supplies, facilities, and managerial, technical, and advisory services) in support of State and local assistance efforts....”³³

In an actual or potential Incident of National Significance that is not encompassed by the Stafford Act, the President may instruct a Federal department or agency, subject to any statutory limitations on the department or agency, to utilize the authorities and resources granted to it by Congress. In accordance with [HSPD-5](#), Federal departments and agencies are expected to provide their full and prompt cooperation, available resources, and support, as appropriate and consistent with their own responsibilities for protecting national security.³⁴

At the regional level, interagency resource coordination and multiagency incident support are provided by the Regional Response Coordination Center (RRCC). In the field, the Secretary of Homeland Security is represented by the PFO (and/or the Federal Coordinating Officer (FCO)/Federal Resource Coordinator (FRC) as appropriate). Overall Federal support to the ICS on-scene is coordinated through the Joint Field Office (JFO).

³¹ President George W. Bush. [Homeland Security Presidential Directive \(HSPD\)-5: Management of Domestic Incidents](#). Washington, D.C.: Office of the Press Secretary, White House, 28 February 2003.

³² DHS. [National Response Plan](#). December 2004. p. 9

³³ Sections 402(a)(1) and 502(a)(1) of the Stafford Act, 42 U.S.C. §5170a(1) and § 5192(a)(1)

³⁴ DHS. [National Response Plan](#). December 2004. p. 7

The RRCC coordinates regional response efforts, establishes Federal priorities, and implements local Federal program support until a JFO is established. The JFO is a temporary Federal facility established locally to coordinate operational Federal assistance activities to the affected jurisdiction(s) during Incidents of National Significance.³⁵

Recovery Plan Format

It is recommended that a single, overarching recovery plan be developed to coordinate the activities of the installation and State, tribal and local jurisdictions at a given site. The integrated approach is more efficient from a planning perspective (compared to separate, parallel plans for each jurisdiction) and will facilitate coordination among the organizations. Also, many aspects of recovery must be coordinated in order to be effective. For example, if several jurisdictions put in competing requests to the Army for monitoring services, confusion might result and some important monitoring activities might be delayed. A coordinated plan would ensure that monitoring is conducted in proper order of priority.

A single integrated recovery plan can be designed to accommodate the decision making prerogatives of all included organizations. Jurisdiction-specific annexes may be appropriate in some cases to accommodate the unique needs of particular jurisdictions.

Resources for Recovery Planning

The *CSEPP Recovery Workbook* provides a template for recovery planning along with background, explanatory, and reference materials.³⁶

The *CSEPP Monitoring Report* provides detailed information and guidance on the process of evaluating residual hazards in the area after a chemical event.³⁷

D. Public Education

Public education is critical in ensuring that residents know what to do in the event of an emergency. The purpose of a public outreach program is to increase the public's knowledge of emergency protective actions. In addition, an effective outreach program should maintain residents' trust in emergency management; foster two-way communications between the program and program stakeholders; and communicate the community risks posed by the chemical stockpile.

The initial step in developing a public education program is using research to determine the level of existing protective action knowledge. The CSEPP Public Affairs Integrated Process Team developed a public awareness measurement program for this purpose. Communities are encouraged to conduct research to

³⁵ Ibid. p. 16

³⁶ Argonne National Laboratory. *CSEPP Recovery Plan Workbook*. December 2002.

³⁷ *Chemical Stockpile Emergency Preparedness Program Off-post Monitoring Integrated Product Team Report*. p. 23. January 1999.

determine the level of community knowledge of protective actions and gather pertinent information necessary to design and implement a targeted outreach campaign. Research is also used to measure the success of an outreach plan.

Once the research is compiled and analyzed, communities should develop an outreach strategy that is based on the research. Following the completion of the outreach campaign, follow-up research should be conducted to measure the success of the campaign. This process is illustrated in the following chart.

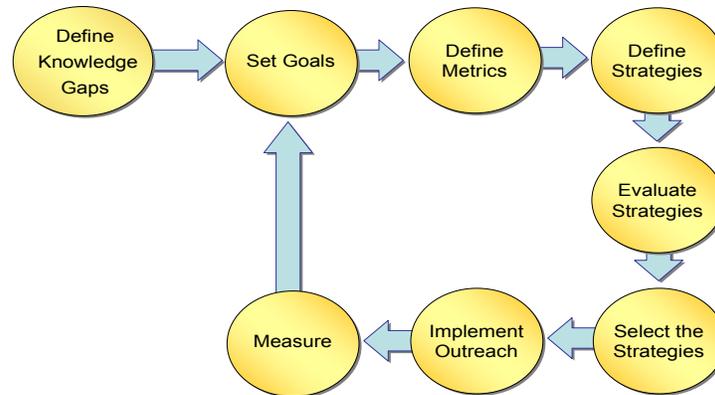


Figure 3: Research Process Measuring the Success of an Outreach Campaign

CSEPP communities have successfully used a variety of both paid and unpaid outreach methods to reach their populations. Funding for paid advertising and other outreach efforts should be included in annual program budgets.

CSEPP public education programs should be tailored to each community's needs. Sample channels of communications include:

- Printed public information materials such as calendars, telephone directory inserts, and brochures distributed to residents and special facilities such as schools, nursing homes, and hospitals. Printed materials should include specific information such as details regarding relocation points, special facility plans, and items to take to a mass care center.
- Posters and displays in areas where transient populations pass
- Presentations before civic and fraternal organizations and other formal and informal groups
- Public meetings held specifically for this purpose
- Programs designed for specific audiences, including schoolchildren, local media, and community leaders
- Paid advertisements to target specific outreach messages

For additional guidance regarding all aspects of establishing a public education program, please consult the [CSEPP Public Affairs Planning Guidance Compendium Workbook](#).³⁸

E. Emergency Public Information

This section provides guidance on the dissemination of emergency public information in the warning, protective action, and recovery phases of a chemical emergency. An effective emergency public information program anticipates the concerns of the public and ensures that proper instructions are provided in a timely manner, to include recognizing and addressing the unique information needs of special population groups. The dissemination of information that is useful, consistent, and easy to understand contributes to the overall well-being of the community by increasing the likelihood that people will respond appropriately during an emergency.

Emergency public information operations should be initiated immediately following an emergency and continued until all external information needs are fully satisfied. The initial public information focus will be on immediate, urgent protective actions to protect life and property in affected areas, like SIP or evacuation. Official information disseminated in the response phase will support and enhance alert and notification messages, such as those provided by TARs and EAS. As the operation shifts into long-term, information will play an important part in facilitating remediation and recovery.

The news media play a key role in disseminating emergency information to the public. Following an emergency, the news media will provide official announcements, as well as other information developed through independent reporting. The public will look to the news media (i.e., newspapers, radio, television, and the Internet at local, tribal, State, regional, national, and international levels) as a primary source of information. Local news media will provide the most detailed coverage, with other media reporting on broader story elements. Significant and immediate news media coverage should be anticipated for any chemical emergency.

Establishing and maintaining a strong working relationship with the news media will have positive impacts across the emergency response, including dispelling rumors and misinformation, increasing public confidence, and identifying public information needs. Local officials have primary responsibility for ensuring that the news media and the public are provided with accurate, timely, and coordinated information, with support from State and Federal officials.

³⁸ Department of the Army and DHS/FEMA. *CSEPP Public Affairs Planning Guidance Compendium Workbook*. Prepared by Argonne National Laboratory. June 2005.

Emergency Public Information

As with each operational aspect of response, an effective emergency public information program requires careful planning and considerable advance preparation. Local plans should reflect responsibility for emergency public information operations, to include:

- Mechanisms for sharing and coordinating information among all responding agencies and organizations;
- Development and production of information materials;
- Dissemination of information through various methods; and
- Monitoring and analysis of news media coverage and public phone calls with rapid response capability to address identified issues.

There are distinct advantages to creating a single, coordinated public information system for use by on-post and off-post officials during an emergency. This is best accomplished through a JIS and a JIC. For all planning steps in the design, implementation, and execution of an emergency public information program, strong support is required from management level staff at Federal, State, tribal, and local CSEPP jurisdictions.

Joint Information System

Following an emergency event, staff in a number of jurisdiction and response facilities will have the latest pertinent information about the incident, the response, the situation status, and associated public health and safety conditions. The mission of a JIS is to provide a mechanism for accurate, timely, and coordinated information to be disseminated to the public and the news media from participating responders.

The components of a JIS must be put into place before an emergency occurs, including the plans, protocols, and structures used to provide information during incident operations. This encompasses all public information efforts related to an incident, including those undertaken at Federal, State, local, tribal, and private organization levels. Key elements of JIS planning include:

- Interagency coordination and integration;
- Developing and delivering coordinated messages;
- Support for decision-makers; and
- Flexibility, modularity, and adaptability.

In establishing a JIS, each agency, office, and organization that may be part of the emergency response network should be identified and their respective responsibilities noted, including the types of information each would be responsible for or able to provide. Each jurisdiction's procedures for disseminating public information should be coordinated and made compatible with the strategies developed by all other jurisdictions that may be affected by a

chemical emergency. Specific methods for exchanging information among the participants should be established with multiple points of contact and means of communication (e.g., telephone or Internet). Procedures for activating the JIS should be agreed upon and it should be determined whether the JIS member will assign a spokesperson to the JIC.

Partnership and teamwork are central to achieving the JIS mission and implementing successful public affairs programs and strategies. By integrating public information activities across jurisdictions and with other private-sector and nongovernmental organizations, the JIS allows for important emergency information to be provided to the public and the news media almost immediately after an event. The JIS recognizes that Army and other Federal and State PIOs may be unable to report to the JIC, or that more than one JIC may be established. The JIS allows PIOs to communicate effectively and make joint announcements as if located in the same facility.

Emergency public information planning should provide for jurisdictions to train and exercise in the JIS structure as often as possible. The JIS should be activated in emergencies whenever feasible so that even in limited responses it becomes a familiar tool for PIOs, emergency responders, and the news media. At the same time, glitches in procedures and protocols can be identified and fixed. Exercises are an opportunity to test the JIS structure, to include explaining the JIS concept to the local news media.

Joint Information Center

A JIC is the physical location where the public information staff gathers to provide accurate, timely, and coordinated emergency information to the public and the news media. The JIC should include representatives of each jurisdiction, agency, private-sector, and non-governmental organization involved in incident management activities. An effective JIC will gather, produce, and disseminate information using all available means and have access to the most current information regarding the response. The JIC will monitor public phone calls and analyze news media coverage of the emergency, with a rapid response capability to address identified gaps in information, misinformation, or unconfirmed information (i.e., rumors or speculation) that may hamper the response effort.

Planning for the JIC should anticipate that not all representatives will be able to gather in one location. For complex incidents spanning a wide geographic area, multiple JICs may be necessary. The JIS should be used to coordinate information activities among the primary JIC and other locations where public information staff will be working, to include additional JICs established by other response organizations. Adequate phone, radio, and computer linkage among facilities is critical. Information sharing will ensure consistency of official information, enhance credibility of response efforts, and encourage greater public understanding and support.

The December 2004 DHS [NRP](#) identifies the virtual JIC as a mechanism to link all participants through technological means when “geographical restrictions, incident management requirements, and other limitations preclude physical attendance by public affairs leadership at a central location.” The use of technological advances to facilitate communication can allow for greater flexibility and expanded resources within a JIC. This in turn can reduce the need for volunteers in CSEPP JICs and provide for CSEPP-trained PIOs to assist during any chemical emergency.

The JIC should have pre-established operating procedures, organizational structures, position descriptions, and memoranda of agreement/understanding that guide participation during the response and recovery phases. Planning should cover responsibility for activation and deactivation of the JIC and anticipate the staffing, equipment, and supplies needed for rapidly processing emergency public information. The JIC should be located in a safe, secure area outside of the IRZ and should be large enough to accommodate all expected staff, visitors, and news media. Planning should anticipate situations in which the primary JIC facility cannot be occupied and an alternate JIC will be necessary. A mobile JIC equipment package can serve as an alternate JIC and can be used to augment a primary JIC or the JIC at another CSEPP site.

Emergency public information planning should provide for jurisdictions to train and exercise in the JIC structure as often as possible, including cross-training in specific JIC functions. The JIC should be activated in emergencies whenever feasible so that even in limited responses it becomes a familiar tool for PIOs, emergency responders, and the local news media. This will allow for glitches in procedures and protocols to be identified and fixed. Planning should also address surge situations where staffing, facilities, equipment, and other resources may be inadequate to meet the needs of the public or the news media.

Remediation and Recovery

Once the immediate response to an emergency has been completed and characterized by information that focuses on the health, safety, and protection of the public, a longer-term remediation and recovery phase will begin. This phase, which can last for days, weeks, or months, is characterized by information regarding residual hazards, protective actions, care, and services available to the public, and cleanup, remediation, and claims procedures.

Planning for the remediation and recovery phase should provide for a transition from the emergency response to a longer-term recovery mode. A key focus will be the development of a staffing plan that covers a potentially lengthy JIC activation and that anticipates possible public affairs resources and support from the State and/or Federal government.

During this period, the remediation and recovery plan should support CSEPP public information staff in:

- Gathering information and coordinating with public information staff of all organizations involved in the recovery effort;
- Obtaining advice from experts in recovery fields such as environmental remediation, claims, and social services; and
- Disseminating recovery information to the public and the news media via news releases, interviews, news conferences and briefings, and responses to media and public inquiries.

For additional guidance regarding all aspects of establishing an emergency public information program, please consult the *CSEPP Public Affairs Planning Guidance Compendium Workbook*.³⁹

F. Emergency Response Agreements

Effective response to a CAI requires a coordinated effort among on-post and off-post authorities and may involve many Federal, State, tribal, local, and private organizations. Agreements between these organizations can help to bridge their response plans and ensure that response efforts are coordinated and complementary. Agreements can also serve to ensure that needed resources will be available for response and to secure participation in training and exercises to fine-tune response capabilities and maintain proficiency.⁴⁰

Almost all emergency management organizations are party to general response agreements, such as mutual aid agreements (MAAs), with neighboring jurisdictions. NIMS guidance recommends MAAs with neighboring or nearby jurisdictions as well as nongovernmental organizations that can provide assistance in an emergency.⁴¹ The NIMS Integration Center (NIC), in conjunction with DHS/FEMA and the National Emergency Management Association (NEMA), has established a standard set of emergency assistance categories to facilitate resource requests under MAAs.⁴²

Each CSEPP state (and nearly every other state) is party to the Emergency Management Assistance Compact (EMAC). EMAC provides a legal framework and a standardized method for states to request emergency assistance from other states. It has been used in response to hurricanes and other disasters.

³⁹ Department of the Army and DHS/FEMA. *CSEPP Public Affairs Planning Guidance Compendium Workbook*. Prepared by Argonne National Laboratory. June 2005.

⁴⁰ Headquarters, Department of the Army. *DA Pamphlet 50-6: Chemical Accident and Incident Response and Assistance (CAIRA) Operations*. Washington, D.C.: HQDA, 26 March 2003.

⁴¹ Department of Homeland Security. *National Incident Management System*. Sec. III.B.2(e). March 2004. Available online at http://www.fema.gov/doc/nims/nims_implementation_plan_template.doc.

⁴² Department of Homeland Security, Federal Emergency Management Agency. National Mutual Aid and Resource Management Initiative. Available online at http://www.fema.gov/nims/mutual_aid.shtm. Last updated 13 May 2005.

In addition to these general assistance agreements, each CSEPP community has one or more agreements specific to CSEPP. Agreements that are relevant to chemical event response should be referenced in or appended to CSEPP plans. Planners should be aware of relevant agreements and should periodically review whether current agreements are up to date, and whether additional agreements may be needed.

Agreements can take many forms, including a Memorandum of Agreement (MOA), MOU, MAA, or Interservice Support Agreement (ISSA).

MAAs are encouraged under NIMS. To encourage standardization of terminology and definitions for resources referenced in agreements, the NIC has released the *National Mutual Aid Glossary of Terms and Definitions*, and *Resource Typing Definitions* for 120 different kinds of resources.⁴³

CSEPP Emergency Notification Agreements

Due to the importance of rapid response to an emergency, procedures for notification to off-post authorities, PAD making, and public alerting and instruction should be clearly explained in an agreement. It may be prudent to include in the agreement a procedure for direct Army installation implementation of IRZ protective actions when extreme urgency requires immediate response. Further guidance on alert and notification procedures may be found in Chapter V—Communications and Information Management.

Other CSEPP Agreements

Other response functions where an agreement may be useful include:

- Animals/veterinary services
- Automated information systems (AIS)
- Coroner/mortuary services
- Damage assessment
- Decontamination
- Emergency worker operations
- Evacuation
- Firefighting
- Hazard modeling/analysis
- Information exchange
- JIS/JIC
- Law enforcement
- Meteorology
- Off-post monitoring
- PAD making
- Public works support
- Radio communications support
- Reception centers
- Re-entry and restoration
- School evacuation
- Search and rescue
- Sheltering
- Special populations
- Specialized transportation (e.g., buses)

⁴³ Available at www.fema.gov/nims/mutual_aid.shtm.

- Medical support including primary receiving hospitals, specialty hospitals such as burn or trauma centers, and ambulance services
- Mass care shelters
- Support from other military installations/organizations
- Traffic and access control

Format for Agreements

NIMS guidance recommends that agreements should include the following elements or provisions, as required:

- Definitions of key terms used in the agreement;
- Roles and responsibilities of individual parties;
- Procedures for requesting and providing assistance;
- Procedures, authorities, and rules for payment, reimbursement, and allocation of costs;
- Notification procedures;
- Protocols for interoperable communications;
- Relationships with other agreements among jurisdictions;
- Workers compensation;
- Treatment of liability and immunity;
- Recognition of qualifications and certifications; and
- Sharing agreements.

Further Guidance and Examples

CSEPP has developed the *CSEPP Memorandum of Agreement and Memorandum of Understanding (MOA/MOU) Guide* to offer guidance on agreements to support CSEPP-related preparedness.⁴⁴ The *MOA/MOU Guide* gives general information about the process of developing agreements and provides example agreements for nine CSEPP-related functions: information exchange, alert and notification, firefighting, traffic and access control, medical support, JISs, sheltering of evacuees, off-post monitoring, and support from other military organizations.

G. CSEPP-Specific Equipment Requirements

Interoperability, Standardization, and Planning

Incident management and emergency responder organizations at all levels rely on various types of equipment to perform mission essential tasks. A critical component of operational preparedness is the acquisition of equipment that will

⁴⁴ Argonne National Laboratory. *CSEPP Memorandum of Agreement and Memorandum of Understanding (MOA/MOU) Guide*. Department of the Army and Federal Emergency Management Agency, May 1999.

perform to certain standards, including the capability to be interoperable with equipment used by other jurisdictions. At the national-level, the NIC is tasked to facilitate the development and/or publication of national standards, guidelines, and protocols for equipment certification. This is an on-going process that will be implemented over a period of time. State, tribal, and local jurisdictions will need to monitor progress of the NIC to comply with equipment standards as they are published.

Equipment standards serve multiple purposes including:

- Establishing baseline capabilities and limitations for currently available equipment;
- Guiding equipment procurement decisions; and
- Enhancing interoperability between response agencies.

In order to accomplish this at the local level, strong working relationships must be established to the point where the communities' representatives play a key and integral role in all facets of the equipment acquisition process. Assessment of responder roles, mission definition, and prior planning are essential to ensuring equipment acquisitions will support the anticipated need. A community should first complete a thorough assessment that identifies the most probable roles and missions for their responders. Although the tendency is to try to prepare for every eventuality, that approach is generally neither financially feasible nor appropriate. Thus, the community should determine the most credible and likely "scenarios" as a basis for planning. This assessment can only occur through a coordinated communication and planning effort involving emergency response organizations and emergency planning officials. The CSEPP National Benchmarks provide a basis for this effort. The benchmarks are discussed in detail in the *CSEPP Programmatic Guidance*.

Each CSEPP community should undertake and complete a coordinated effort to produce an "inventory" of the most likely scenarios and anticipated responder roles. Users of this guidance document should recognize that completing this organized process of assessing the threat, planning the response, and identifying equipment gaps is a prerequisite to equipment selection. The results of this assessment can be used to determine the required capabilities of the equipment as well as the operational practices and procedures with which the equipment must fit. Equipment should never be purchased unless a clear plan for its use within CSEPP is established.

Functional requirements are derived in equal measure from an assessment of the threat(s) responders will have to react to and the operational practices and procedures (i.e., how they do business) they will employ to manage the threat. For example, responders manning TCPs near the edge of a risk envelope and hospital department personnel workers will have different requirements with regards to

protection, portability, weight, and duration of use for personal protective equipment (PPE).

In addition to the considerations outlined previously, the following factors should be evaluated as response plans are developed and equipment items purchased in support of those plans:

- Consider and plan for the custom batteries/power systems that may be required.
- Consider the environmental factors for perishable items, such as batteries. Adulteration can occur quickly in climatic extremes.
- Do comprehensive “power planning” to look at the power needs of the total response capability.
- Pay particular attention to the combination of monitoring/diagnostic equipment and environmental factors such as climate control, lighting, refrigeration, and information equipment/computer support.
- When selecting durable equipment, consider the needs of durability, appropriateness for field use, and whether the item is disposable or whether it can be decontaminated.

Remember to budget for the routine maintenance of equipment as specified by the manufacturers.

Resource Typing

The National Mutual Aid and Resource Management System is an initiative undertaken by DHS through NIC and FEMA, in cooperation with NEMA. This system will enhance emergency readiness and response at all levels of government through a comprehensive and integrated system that will allow a jurisdiction to augment response resources if needed. The system will allow emergency management personnel to identify, locate, request, order, and track outside resources quickly and effectively.

A key concept of the National Mutual Aid and Resource Management System includes Resource Typing Definitions for documenting and inventorying disaster response resources in terms of categories, kinds, components, metrics, and typing definitions. Resource Typing Definitions provide emergency managers with the information they need to request and receive the resources required during an emergency or disaster. Each jurisdiction should develop and/or update their resource inventories in accordance with the available typed definitions. Completed Resource Typing Definitions are available through NIC at http://www.fema.gov/nims/mutual_aid.shtm.⁴⁵ For resources that have not yet been typed, resources should be defined by capacity and capability in accordance

⁴⁵ Department of Homeland Security, Federal Emergency Management Agency. National Mutual Aid and Resource Management Initiative. Available online at http://www.fema.gov/nims/mutual_aid.shtm. Last updated 13 May 2005.

with the established resource typing methodology. Up-to-date inventories of response assets are critical to an effective NIMS.

H. Applicable Standards

Various laws, regulations, and directives allocate responsibility and set standards for how the CSEP Program is carried out. These laws and regulations affect many aspects of CSEPP, from budgets and funding to cleanup procedures. For CSEPP planners, the most directly applicable and important standards are:

- Public safety exposure standards (AEGLs). These are used for assessing danger to the public and determining appropriate protective actions.
- Workplace safety exposure and protective equipment standards (Airborne Exposure Limits [AELs] and Occupational Safety and Health Administration [OSHA] standards). These are used for protection of emergency workers and determining work rules and use of PPE.
- Hospital standards and guidelines. Hospitals are regulated to ensure a certain level of preparedness for emergencies.
- [HSPD-5](#) and [HSPD-8](#), directing use of NIMS.

Public Safety Exposure Standards (AEGLs)

AEGLs were developed for the EPA by the National Research Council to serve as a basis for actions to protect the public from single-incident exposure to hazardous substances. Below is an explanation by the U.S. Army Center for Health Promotion and Preventive Medicine (USACHPPM):

Acute Exposure Guideline Levels (AEGLs) are concentrations of a chemical in the air above which different health effects could begin to occur amongst the more sensitive (susceptible) members of the general population. AEGLs are being developed for hundreds of toxic industrial chemicals as well as chemical warfare agents. They are developed by the National Advisory Committee (NAC) for AEGLs, reviewed by the National Research Council . . . Committee on Toxicology, and are federal guidance for the assessment and management of short one-time exposure incidents (accidents or intentional terrorist attacks) involving releases of chemical gases. Unlike any other toxicity values for emergency response, AEGLs are established for multiple exposure periods ranging from minutes to hours (10 min, 30 min, 1 hr, 4 hr, 8 hr), providing critical information to planners and responders.

The NAC derives AEGLs using a procedure recommended by the [National Research Council] to ensure that the following generic levels are protective (safe-sided) for the general population, including susceptible individuals such as children, persons with respiratory illness, and the elderly:

AEGL 1—level above which non-disabling, reversible discomfort may be noted.

AEGL 2—level above which more serious effects may occur including possible long-lasting or escape-impairing effects.

AEGL 3—level above which exposures may become life threatening or result in death.⁴⁶

AEGL thresholds have been set for nerve and blister agents in the U.S. chemical weapons stockpile (Table 1). CSEP Program policy is to use AEGLs for protective action decision making.

Table 1: Chemical Agent AEGLs (concentrations in PPM (mg/m³))⁴⁷

Nerve Agent GB (Sarin)					
	10 min	30 min	60 min	4 hr	8 hr
AEGL-1	0.0012 [0.0069]	0.00068 [0.0040]	0.00048 [0.0028]	0.00024 [0.0014]	0.00017 [0.0010]
AEGL-2	0.015 [0.087]	0.0085 [0.050]	0.0060 [0.035]	0.0029 [0.017]	0.0022 [0.013]
AEGL-3	0.064 [0.38]	0.032 [0.19]	0.022 [0.13]	0.012 [0.070]	0.0087 [0.051]
Nerve Agent VX					
	10 min	30 min	60 min	4 hr	8 hr
AEGL-1	0.000052 [0.00057]	0.000030 [0.00033]	0.000016 [0.00017]	0.0000091 [0.00010]	0.0000065 [0.000071]
AEGL-2	0.00065 [0.0072]	0.00038 [0.0042]	0.00027 [0.0029]	0.00014 [0.0015]	0.000095 [0.0010]
AEGL-3	0.0027 [0.029]	0.0014 [0.015]	0.00091 [0.010]	0.00048 [0.0052]	0.00035 [0.0038]
Sulfur Mustard					
	10 min	30 min	60 min	4 hr	8 hr
AEGL-1	0.060 [0.40]	0.020 [0.13]	0.010 [0.067]	0.0030 [0.017]	0.0010 [0.0083]
AEGL-2	0.090 [0.60]	0.030 [0.20]	0.020 [0.10]	0.0040 [0.025]	0.0020 [0.013]
AEGL-3	0.59 [3.9]	0.41 [2.7]	0.32 [2.1]	0.080 [0.53]	0.040 [0.27]

The Army uses a computer model (currently D2-Puff) to estimate potential exposure to a chemical agent release. The D2-Puff model portrays the area to be covered by each AEGL threshold that the user has selected to display. A single hazard envelope is also displayed which portrays the area that may be exposed to the lowest level being modeled or higher. The default is to display all three AEGLs, but the user may select one or two AEGLs that will not be modeled. PARs are normally made for areas at risk of exposure (i.e., inside the risk

⁴⁶ USACHPPM. *Health Effects Associated with Sulfur Mustard Acute Exposure Guideline Levels*. January 2003.

⁴⁷ Source: EPA AEGL program <<http://www.epa.gov/oppt/aegl/>>.

envelope) to AEGL-2 or higher. Areas that will be at risk for AEGL-1 exposure should be identified to the off-post officials with a PAR of “no action required,” or another agreed to action.

Workplace Safety Standards

After a chemical event, there is a potential for emergency workers to encounter hazardous situations during the course of their efforts, including risk of exposure to chemical agent. All EOPs should address responsibility for emergency worker safety in accordance with all applicable regulatory requirements including OSHA, EPA, and NIMS/ICS principles. CSEPP plans should identify workers who may be at risk of exposure to chemical agent, and provide for appropriate equipment, training, qualification, policies, and procedures to minimize any associated health and safety risks.

Workplace Safety Standards: Responsibility for the Emergency Responder/Receiver

Worker safety, as it pertains to response activities for a hazardous materials incident, is extensively described by OSHA under CFR§1910.120q. Under such circumstances, personnel must conform to ICS while performing emergency response activities.

An Integrated Incident Action Plan, which describes the safety activities that must take place at the incident response site (for first responder, Emergency Medical Services [EMS], hospital), is developed at the site where decontamination is being performed. Under the ICS specified by NIMS, responsibility for emergency worker safety falls to the Incident Commander (IC) who appoints a Safety Officer (SO). The SO is responsible for oversight and implementation of worker protection. In cases of a multi-jurisdiction response, a Unified Command approach should be implemented. At all decontamination sites, including on-post and off-post (EMS and hospital), a SO must be designated in order to assure worker safety for those responding to a CSEPP incident. The Planning Section and Operations Section may also assist with hazard assessment and identifying assignments that place workers at risk. As described in the [NIMS](#) guide:

(b) Safety Officer.

The SO monitors incident operations and advises the IC on all matters relating to operational safety, including the health and safety of emergency responder personnel. The ultimate responsibility for the safe conduct of incident management operations rests with the IC or UC and supervisors at all levels of incident management. The SO is, in turn, responsible to the IC for the set of systems and procedures necessary to ensure ongoing assessment of hazardous environments, coordination of multiagency safety efforts, and implementation of measures to promote emergency responder safety, as well as the general safety of incident operations The SO, Operations Section Chief, and Planning Section Chief must coordinate closely

regarding operational safety and emergency responder health and safety issues.⁴⁸

The **NIMS** guide also stresses the importance of accountability for worker safety. A single SO should have both the responsibility and the authority to implement appropriate safety measures:

The SO has emergency authority to stop and/or prevent unsafe acts during incident operations. In a UC structure, a single SO should be designated, in spite of the fact that multiple jurisdictions and/or functional agencies may be involved. Assistants may be required and may be assigned from other agencies or departments constituting the UC. The SO must also ensure the coordination of safety management functions and issues across jurisdictions, across functional agencies, and with private-sector and nongovernmental organizations. It is important to note that the agencies, organizations, or jurisdictions that contribute to joint safety management efforts do not lose their individual identities or responsibility for their own programs, policies, and personnel. Rather, each entity contributes to the overall effort to protect all responder personnel involved in incident operations.⁴⁹

The ICS Commander's role in selecting PPE for emergency workers is also mandated under OSHA regulations.⁵⁰

Planning Considerations for Safety of Emergency Workers

Emergency worker safety is an important factor in any emergency response, particularly in a response involving hazardous materials. This subsection addresses planning measures for assessing and protecting against hazards of chemical agent exposure. Other aspects of worker safety should also be addressed, including the hazards to personnel who are wearing PPE. For example, heat stress, which can occur while wearing PPE, has serious consequences. Prevention of heat stress can be found in the CSEPP Emergency Worker Protection Program.⁵¹

Planning for emergency worker protection should provide that:

- The types of tasks that may involve a risk of chemical agent exposure, and personnel who may be called upon to perform such tasks, are identified;
- Procedures are in place for worker protection associated with decontamination, including wearing of PPE, the buddy system, medical

⁴⁸ **NIMS** guide section II.A.3.b.(2)(b) (March 2003).

⁴⁹ **NIMS** guide section II.A.3.b.(2)(b) (March 2003).

⁵⁰ 29 CFR 1910.120(q)(3)(iii).

⁵¹ *CSEPP Medical Resource Guide*.

screening and support, and control/accountability of workers operating in risk areas;

- Appropriate personnel are qualified for such assignments through training, equipment qualification, and equipment issue;
- There are clear lines of responsibility for emergency worker safety;
- Appropriate protective equipment and clothing is available;
- Responsibility is assigned for information flow from the hazard analysis group to the SO;
- Responsibility is assigned for medical support for emergency workers;
- Policies and agreements are in place for the protection of any personnel from other jurisdictions, responding under mutual aid, who may enter the risk area; and
- Records are kept of assignments considered to involve risk of exposure.

Emergency worker safety provisions may be addressed in a separate worker safety plan that is referenced in the CSEPP plan.

Exposure Limits for Emergency Workers

The Centers for Disease Control and Prevention (CDC) has promulgated AELs for workers for both nerve and blister agents.⁵² Similar to AEGLs, AELs have been established for multiple periods, although the periods are different from those of the AEGLs. The four AEL exposure limits are:

- Immediately Dangerous to Life or Health (IDLH) is a level where even short exposures (less than 30 minutes) are likely to cause death or permanent adverse health effects, or may prevent escape.
- Short-Term Exposure Limit (STEL) is the maximum concentration to which unprotected chemical workers may be exposed for up to 15 minutes continuously.
- Worker Population Limit (WPL) is the maximum allowable concentration to which an unprotected chemical worker may be exposed for an eight-hour workday and 40-hour workweek over 30 years.
- General Population Limit (GPL) is the maximum concentration to which the general population may be exposed continuously, based on exposure 24 hours per day, 7 days per week, for a 70-year lifetime.

⁵² Final recommendations for nerve agents, 68 Fed. Reg. 58348 (9 October 2003) and interim recommendations for mustard agents, 69 Fed. Reg. 24164 (4 May 2004).

Table 2 provides the IDLH, STEL, WPL, and GPL levels for the chemical agents in the U.S. stockpile.

Table 2: Airborne Exposure Limits

Agent	IDLH (immediately hazardous)	STEL (15 minutes)	WPL (40-hr. workweek)	GPL (continuous lifetime exposure)
GA, GB	1×10^{-1} mg/m ³	1×10^{-4} mg/m ³	3×10^{-5} mg/m ³	1×10^{-6} mg/m ³
VX	3×10^{-3} mg/m ³	1×10^{-5} mg/m ³	1×10^{-6} mg/m ³	6×10^{-7} mg/m ³
H, HD	7×10^{-1} mg/m ³	3×10^{-3} mg/m ³	4×10^{-4} mg/m ³	2×10^{-5} mg/m ³

OSHA Requirements and PPE

OSHA and EPA standards require use of appropriate protective equipment and procedures for emergency workers responding to a hazardous material incident.⁵³ OSHA has indicated that these requirements apply to CSEPP.⁵⁴

Under OSHA standards, positive pressure self-contained breathing apparatus, or positive pressure air-line respirators equipped with an escape air supply, must be used when chemical exposure levels present will create a substantial possibility of immediate death, immediate serious illness or injury, or impair the ability to escape. Totally encapsulating chemical protective suits (protection equivalent to Level A protection) must be used in conditions where skin absorption of a hazardous substance may result in a substantial possibility of immediate death, immediate serious illness or injury, or impair the ability to escape.⁵⁵ When operating in an area that is suspected to be contaminated, but where the level of contamination is not known, Level A gear will be required until there is monitoring evidence to show that a lower level of PPE will be sufficient. Employees engaged in emergency response who are exposed to hazardous substances presenting a potential inhalation hazard must wear positive pressure SCBA until the IC determines by air monitoring that a decreased level of respiratory protection will be sufficient.⁵⁶

OSHA has indicated that in the case of a chemical event, computer modeling of the release may be used as a tool for initially determining the area where PPE will be required.⁵⁷

⁵³ 29 CFR 1910.120; 40 CFR 311.

⁵⁴ John B. Miles, Jr., Director, OSHA Directorate of Compliance Programs. Letter to Phyllis G. Thompson, FEMA. 3 February 1995.

⁵⁵ 29 CFR 1910.120(g)(3)(iii, iv).

⁵⁶ 29 CFR 1910.120(q)(3)(iv).

⁵⁷ In a letter dated June 24, 1996, to Ms. Cheri Foust of Oak Ridge National Laboratory (ORNL), John B. Miles, Jr., Director, OSHA Directorate of Compliance Programs, stated, “After the accidental release of nerve agent and prior to the emergency-response personnel entering a contaminated area, or potentially contaminated area, airborne-exposure levels and surface contamination must be measured... The Army’s D2PC plume dispersion model can be used to define off-site potentially contaminated areas.”

In addition to PPE requirements, workplace safety regulations for emergency workers who may be working in a risk area call for appropriate planning, training, and procedures. Use of PPE must be performed according to a written program. The program must cover various items such as PPE selection, limitations of the equipment, work mission duration, donning and doffing procedures, and limitations due to heat stress.⁵⁸ When operating in hazard areas, such workers must use the “buddy system” (i.e., work in groups of two or more). Also, when operating in hazard areas, back-up personnel must be standing by to provide assistance if necessary (e.g., in case of a respirator malfunction).⁵⁹

The above paragraphs summarize regulations, directives, and interpretive letters available from the Federal OSHA web site (<http://www.osha.gov/>). CSEPP planners should note that responsibility for the enforcement of workplace safety standards is dependent upon location. In some states, a State agency enforces workplace safety standards, and questions on interpretation of the standards under particular circumstances should be directed to that State agency. In other states, Federal OSHA enforces the standards.

Hospital Standards and Guidelines

Like all other aspects of hospital administration, provision of emergency services is subject to numerous regulations and guidelines. The most significant and widely applicable requirements are State licensing regulations, the Emergency Medical Treatment and Active Labor Act (EMTALA)⁶⁰ requirements, and standards published by the Centers for Medicare and Medicaid Services (CMS) (formerly known as the Health Care Financing Administration), Occupational Safety and Health Administration (OSHA), and the Joint Commission on Accreditation of Healthcare Organizations (JCAHO).³

Emergency Medical Treatment and Active Labor Act Requirements

EMTALA obligates hospitals to perform certain services for all persons arriving at the emergency department. The hospital must provide “an appropriate medical screening examination within the capability of the hospital.” If the examination reveals the presence of an emergency medical condition within the statute’s definition (essentially, a condition that jeopardizes life or health if left untreated), then the patient must be treated at least until their condition has stabilized. Until the patient is stabilized, the hospital may not transfer him or her to another facility unless (a) the patient requests it or (b) a physician determines that the medical benefits of transferring the patient outweigh the risks.

⁵⁸ 29 CFR 1910.120(g)(5).

⁵⁹ 29 CFR 1910.120(q)(3)(v,vi).

⁶⁰ 42 U.S.C. § 1395dd. EMTALA applies only to Medicare hospitals and designated rural primary care hospitals, but is not limited to Medicare patients.

²*Best Practices for Hospital Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances*

³JCAHO Environment of Care (EC) Standard 4.10, 4.20, 7.20, 7.40; Information Management (IM) Standard 2.30; Leadership (LD) Standard 3.15; Infection Control (IC) Standard 6.10; and Medical Staff (MS) Standard 4.110.

Occupational Safety and Health Administration (OSHA)

Worker safety requirements are generally governed by federal or state OSHA and the Environmental Protection Agency (EPA). OSHA's mission is to assure the safety and health of America's workers, by setting and enforcing standards; providing training, outreach and education; establishing partnerships; and encouraging continued improvement in workplace safety and health. Workplace safety standards that apply to CSEPP include 29CFR 1910.120, 1910.134, 1910.1200, and 1910.1030 and 40 CFR 311. Also of interest is OSHA's January 2005 guidance document titled *Best Practices for Hospital Based First Receivers of Victims from Mass Casualty Incidents Involving the Release of Hazardous Substances*.⁶¹ This document provides practical information to help hospitals address employee protection and training as part of emergency planning for mass casualty incidents involving hazardous substances.

Joint Commission on Accreditation of Healthcare Organizations Standards

The JCAHO is an independent, not-for-profit organization that issues and administers standards for accreditation of healthcare organizations and programs, including hospitals. Accreditation is voluntary and not all hospitals have it; however, some states recognize accreditation as fulfilling some or all of their State licensing requirements.

JCAHO first implemented comprehensive emergency management standards for hospitals in 2001, and they have continuously expanded their guidance for hospital emergency response.⁶² JCAHO's guidance for hospital emergency operations stresses increased hospital compatibility with local community emergency management operations. As an integral part of a community's emergency response capability, the hospital care environment is now defined in terms of interoperability with local emergency planners and personnel with respect to emergency management command structure and analysis of local hazards and vulnerabilities.

Homeland Security Presidential Directive 5

President George W. Bush directed the consolidation of Federal emergency planning into a single NRP, under the direction of the Secretary of Homeland Security, in HSPD-5, Management of Domestic Incidents, dated February 28, 2003 (refer to <http://www.whitehouse.gov/news/releases/2003/02/20030228-9.html>).

⁶¹ Available at http://www.osha.gov/dts/osta/bestpractices/html/hospital_firstreceivers.html.

⁶² Standards may be found online at http://www1.va.gov/emshg/docs/JCAHO_EC_Std_2004.pdf. See also JCAHO, *Using JCAHO standards as a starting point to prepare for an emergency*, available online at <http://www.jcrinc.com/subscribers/perspectives.asp?durki=2514&site=10&return=1122>.

The purpose of HSPD-5 is to “enhance the ability of the United States to manage domestic incidents by establishing a single, comprehensive national incident management system.” The scope of NIMS is to include response to “terrorist attacks, major disasters, and other emergencies.” The Secretary of Homeland Security, as designated in the Homeland Security Act of 2002 (P.L. 107-296), is responsible for overall coordination of preparation and response.

NIMS may be activated per a request from a Federal agency, state, the President, or whenever two or more Federal agencies are involved in a response. [HSPD-5](#), Section 4, explains the role of the Secretary of Homeland Security:

The Secretary shall coordinate the Federal Government’s resources utilized in response to or recovery from terrorist attacks, major disasters, or other emergencies if and when any one of the following four conditions applies: (1) a Federal department or agency acting under its own authority has requested the assistance of the Secretary; (2) the resources of State and local authorities are overwhelmed and Federal assistance has been requested by the appropriate State and local authorities; (3) more than one Federal department or agency has become substantially involved in responding to the incident; or (4) the Secretary has been directed to assume responsibility for managing the domestic incident by the President.

Although the Secretary of Homeland Security has extensive authority to coordinate Federal actions, HSPD-5 also recognizes and explicitly preserves the statutory roles of the Attorney General and DoD in regards to certain aspects of domestic response. The Attorney General has lead responsibility for criminal investigations of terrorist acts or terrorist threats by individuals or groups inside the United States, and all agencies and departments are directed to support the Attorney General and the FBI in criminal investigation and enforcement.⁶³ The military chain of command for DoD personnel is explicitly preserved as written in Section 9 of HSPD-5:

Nothing in this directive impairs or otherwise affects the authority of the Secretary of Defense over the Department of Defense, including the chain of command for military forces from the President as Commander in Chief, to the Secretary of Defense, to the commander of military forces, or military command and control procedures. The Secretary of Defense shall provide military support to civil authorities for domestic incidents as directed by the President or when consistent with military readiness and appropriate under the circumstances and the law. The Secretary of Defense shall retain command of military forces providing civil support.

The Secretary of Homeland Security is specifically tasked with developing NIMS to coordinate all Federal response and coordinate with State, tribal, local, and

⁶³ President George W. Bush. [Homeland Security Presidential Directive 5 \(HSPD-5\)](#), Section 8. 28 February 2003.

private entity emergency response. NIMS is to be documented (in part) in the NRP. The NRP is to “provide the structure and mechanisms for national level policy and operational direction for Federal support to State and local incident managers and for exercising direct Federal authorities and responsibilities, as appropriate.”

September 8, 2004, Letter to Governors from the Secretary of Homeland Security

On September 8, 2004, [Homeland Security Secretary Ridge issued a letter](#) to the nation’s Governors on implementation of NIMS in State emergency preparedness programs. In that letter, Secretary Ridge noted that HSPD-5 established ambitious deadlines for NIMS adoption and implementation, and FY 2005 is a start-up year for NIMS implementation. The letter states, “To the maximum extent possible, States, territories, tribes, and local entities are encouraged to achieve full NIMS implementation and institutionalization across the entire response system during FY 2005.” However, acknowledging that full implementation may require additional time, the letter outlines requirements for FY 2005, 2006, and 2007, under the guidance and direction of the NIC.

Minimum FY 2005 NIMS Compliance Requirements

State and territory level efforts to implement NIMS must include the following:

- Incorporating NIMS into existing training programs and exercises;
- Ensuring that Federal preparedness funding (including DHS Homeland Security Grant Program, Urban Area Security Initiative [UASI] funds) support NIMS implementation at the State and local levels (in accordance with the eligibility and allowable uses of the grants);
- Incorporating NIMS into EOPs;
- Promoting intrastate MAAs;
- Coordinating and providing technical assistance to local entities regarding NIMS; and
- Institutionalizing the use of ICS.

At the State, territorial, tribal, and local levels, jurisdictions should support NIMS implementation by:

- Completing the NIMS Awareness Course: “National Incident Management System (NIMS), An Introduction,” IS-700 (<http://training.fema.gov/EMIWeb/IS/is700.asp>);
- Formally recognizing NIMS and adopting the NIMS principles and policies;
- States, territories, tribes, and local entities establishing legislation, executive orders, resolutions, or ordinances to formally adopt NIMS;

- Using the NIMS Capability Assessment Support Tool (NIMCAST), which is under development by the NIC, for compliance self-assessment;
- Establishing a timeframe and developing a strategy for full NIMS implementation; and
- Institutionalizing the use of ICS.

FY 2006 and FY 2007 Requirements

In order to receive FY 2006 preparedness funding, the minimum FY 2005 compliance requirements described above must be met. Applicants will be required to certify as part of their FY 2006 grant applications that they have met the FY 2005 NIMS requirements. Additional information about NIMS compliance and resources for achieving compliance will be forthcoming from the NIC. In addition, FY 2005 Federal preparedness assistance program documents will address State and local NIMS compliance. The NIC web page (www.fema.gov/nims) will be updated regularly with information about NIMS and guidance for implementation.

Homeland Security Presidential Directive 8

[HSPD-8](#) establishes Federal policy on implementation of emergency preparedness programs, including setting a national all-hazards preparedness goal, improving coordination of Federal assistance to State and local governments, and improving training and exercises at the Federal, State, and local level. The Directive aims to improve accountability by establishing and tracking measures of success for emergency preparedness programs (refer to <http://www.whitehouse.gov/news/releases/2003/12/20031217-6.html>).

The Secretary of DHS is “the principal Federal official for coordinating the implementation of all-hazards preparedness in the United States.” The Secretary is to develop a national domestic all-hazards preparedness goal, and a set of supporting priorities, targets, and metrics to measure progress toward that goal.

The Directive calls for coordination of Federal agency programs that assist emergency workers. Agencies are to “continue to issue financial assistance awards consistent with applicable laws and regulations,” but information about such programs is to be available through a single point of access, and a “fully coordinated interagency grant process” is to be implemented by September 30, 2005. Agencies that provide assistance, including the Department of Justice (DOJ), Department of Health and Human Services (HHS), Department of Transportation (DOT), Department of Energy (DOE), Department of Veterans Affairs (VA), EPA, and other agencies that provide assistance for first responder preparedness, are to coordinate with DHS to ensure that such assistance supports and is consistent with the national preparedness goal.

The primary mechanism for delivery of Federal preparedness assistance will be awards to the states, and, “To the extent permitted by law, Federal preparedness

assistance will be predicated on adoption of Statewide comprehensive all-hazards preparedness strategies.” Each state is to submit its strategy for review and approval by DHS, as a requirement for receiving preparedness assistance, by September 30, 2005. Federal assistance is to be focused on supporting preparedness for major events, as opposed to everyday first-responder capacity.

Other goals and policies included in the Directive are listed below:

- National standards for first-responder equipment, to promote interoperability and effective and safe operations
- Research and development concerning equipment
- Training and exercises for State and local responders and officials, consistent with the National Preparedness Goal
 - DHS is to coordinate exercise schedules and create a master exercise calendar.
 - DHS is also charged with developing a comprehensive system to improve preparedness through lessons learned from exercises, actual responses, training, and other sources of information.
- Federal agency support for preparedness, including use of quantifiable performance measurements for training, planning, equipment, and exercises; however, “Nothing in this directive shall limit the authority of the Secretary of Defense with regard to the command and control, training, planning, equipment, exercises, or employment of DoD forces, or the allocation of DoD resources.”
- Maintenance of a Federal response capability inventory by DHS. DoD is to provide DHS with a summary of available support to civil authorities.
- Provision of information to the public on preparedness activities, and opportunity for citizen input

DHS is tasked with preparing annual preparedness status reports to the President, including, “state capabilities, the readiness of Federal civil response assets, the utilization of mutual aid, and an assessment of how the Federal first responder preparedness assistance programs support the national preparedness goal.”

1. Training Guidance and Standards

Training within the CSEPP community is critical to ensure proper training for emergency workers, planners, public information officers, and medical personnel. The training should focus on developing the skills and knowledge to plan for and respond to an emergency. Within the CSEPP community, training must be performance driven by recognizing the following:

- Requirements/functions in the emergency operations plan;
- Existing skill sets of the personnel performing these functions; and

- Environment influencing the response.

Personnel should receive task specific training to enable them to accomplish assigned tasks and missions. Training programs must incorporate an evaluation/validation process to ensure that personnel have or are acquiring the skills and knowledge to accomplish their assigned missions. The planner must recognize the success of any plan correlates with the ability of the personnel to accomplish the missions assigned in the plan. Training requirements are described in the *Chemical Stockpile Emergency Preparedness Program Training Management Guidance*.⁶⁴

Overarching training topics for all EOC and response personnel should include:

- EOC OPs/NIMS/ICS;
- Hazard specific first aid;
- Chemical characteristics and health effects;
- Contamination avoidance and control;
- Decontamination procedures; and
- Emergency management automation systems.

A training needs analysis is a critical first step in the implementation of performance-based training. It identifies the areas of emergency response and the tasks that must be performed in dealing with specific emergencies.

An extensive analysis should be undertaken before training and other materials and activities are funded. The analysis should ensure that all target audiences are identified, current capabilities are documented, and performance requirements (skills and knowledge) are stated for the expected participant.

The Training Crosswalk found in Appendix C of the *CSEPP Training Management Guidance* provides the basis for the training needs analysis.⁶⁵ It documents the areas where training materials are available for CSEPP emergency tasks as well as the relationships between the CSEPP emergency tasks, CSEPP training materials, and the CSEPP emergency response exercise outcomes.

Training Courses

A comprehensive training program has been developed through a coordinated effort at all levels of government with planning and implementation assistance and guidance provided by the appropriate emergency management officials at each level. Training issues such as audience definition, objectives, location, and content should be decided and administered by local officials. The local

⁶⁴ FEMA and the Department of the Army. *Chemical Stockpile Emergency Preparedness Program Training Management Guidance*. April 1999.

⁶⁵ Ibid.

emergency management organizations are responsible for maintaining and updating individual training records.

According to the *CSEPP Training Management Guidance* the following is the minimum information to be maintained and kept on file in CSEPP training records:

- Training rosters citing the following:
 - Persons requiring training, and
 - Persons completing training, to include the date of the training and the training agreement number.
- Evaluation instruments (performance tests and course evaluations) used by states in conducting post-training evaluation as required in the training agreement and the plan of instruction. The performance tests are to be maintained within a confidential system of records.
- Student evaluation of training activities. These will be forwarded to the CSEPP regional field office in conjunction with the regular Cooperative Agreement (CA) annual progress reports. All students will be requested to complete the student evaluation form included in Appendix E.
- Lists of qualified instructors for each training activity, which the states have agreed to deliver.
- Complete records of all expenses for each training activity.
- File copy of all reports submitted to DHS.

CSEPP officials should ensure that all efforts are expended to maximize the use of existing training materials and opportunities. Although the primary focus of this section is on elevating the individual's level of performance, the importance of small unit or team training cannot be overlooked. Only by conducting team training at regular intervals can the cohesive links between team members form, thereby creating a response multiplier.

The National Response Plan and the National Incident Management System

The new [NRP](#) has been developed to phase out the existing FRP by the end of calendar year (CY) 2007. The adoption of the NRP and [NIMS](#) establishes a knowledge gap in some sectors of the emergency response community. While a growing number fire and law enforcement departments use ICS in their day-to-day operations, there is a discernible gap in the knowledge base of individuals who have not been considered part of the response community.

Effective training on the policies, procedures, and structures associated with NIMS will prove beneficial in adapting the jurisdiction's existing policies and procedures and becoming NIMS compliant. While the NIMS concept is new, much of the training that will lead to compliancy has been in use for a long time.

The Office for Domestic Preparedness, the Emergency Management Institute, and the National Fire Academy all offer training which serves as the foundational basis for NIMS.

Training Plan Development

Development and presentation of training programs for communities involved in CSEPP is to be implemented as jointly agreed upon by DHS-HQ CSEPP staff and the individual states affected. Also, DHS-HQ, CMA, and regional staff of the states affected will review and approve chemical-related technical information contained in DHS- and state-developed training materials. The DA will review and approve the content of all training activities developed by DA entities.

CSEPP-specific training is intended to supplement, not replace or duplicate, general purpose emergency management training available to CSEPP jurisdictions from other sources (DHS emergency management training programming). To the extent possible, CSEPP jurisdictions are encouraged to take advantage of existing training available from these other sources.

The following items should be utilized as the basis for developing a comprehensive training plan:

- Identify individual and team tasks and the standards and conditions for each task.
- Identify individuals assigned to emergency planning, management, and response tasks.
- Identify required certifications and clearance for all response personnel.
- Provide for sustainment training for emergency response personnel.
- Identify personnel with training coordination responsibilities.
- Ensure training documentation is submitted to appropriate authority for personnel credentialing/certification.

J. Exercises

A Federally coordinated exercise and validation program comprised of officials at all levels of government has been developed for the CSEPP community. This program provides an assessment of preparedness levels at each site. The overarching goal of this program is to ensure the protection of the public, workforce, and environment at each of the sites. Through the CSEPP exercise program, personnel in the response communities demonstrate their proficiency and their fulfillment of established standards within their respective areas of response expertise. The exercise program will be utilized to test, evaluate, refine, validate, and maintain existing and future preparedness planning efforts.

The requirement to move to a NIMS-compliant response structure will require exercises to validate the procedures and processes adapted by the NRP and NIMS

at the CSEPP community levels. Examples of the structures to be implemented and exercised are ICS, Area Command (AC), and Unified Area Command (UAC). Although these command systems have been in wide use in the civilian first responder community since the 1970s, the requirement for DoD and health care agencies to use these command structures is a relatively recent development.

Specific guidelines for the exercise program are contained in a separate document, *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program (Blue Book)*.⁶⁶ The goals of the CSEPP exercise program are as follows:

- Evaluate emergency plans, response capabilities, and training adequacy.
- Based on exercise performance outcomes, identify opportunities to improve procedures, training, or equipment.
- Improve the coordination between the installations and the surrounding civilian communities by means of relationships fostered during exercises.
- Ensure the active participation of critical organizations, the Army, FEMA, and State and local jurisdictions, to serve as a highly visible reminder to the public of the unwavering commitment of these organizations to their protection.
- Evaluate exercise development and conduct to ensure NIMS compliance.
- Fulfill Army regulatory requirements for exercises,⁶⁷ while designing exercises consistent with initiatives in other hazard programs for greater efficiency and benefit.

Specific guidelines for a Federal evaluation of hospitals that are part of the CSEPP community have been developed. They are located in the *Medical Resource Guide*.

An effective exercise program can only be developed and implemented through the close coordination of several officials. The composition of an effective exercise planning team is discussed in *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program (Blue Book)*.⁶⁸ Each member of the team brings critical skills, resources, and guidance to bear on the exercise program.

⁶⁶ Department of the Army and the Department of Homeland Security. *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program*. 7 September 2004.

⁶⁷ Headquarters, Department of the Army. *DA Pamphlet 50-6: Chemical Accident and Incident Response and Assistance (CAIRA) Operations*. Washington, D.C.: HQDA, 26 March 2003.

⁶⁸ Department of the Army and the Department of Homeland Security. *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program*. 7 September 2004.

K. Medical

Purpose

Effective planning by State, tribal, and local jurisdictions is necessary to ensure an integrated and coordinated response for EMS and hospitals. While an incident involving release of chemical agent off-post is considered extremely unlikely, preparedness and training in recognizing the and treating chemical agent exposure is an important aspect of preparedness for CSEPP communities.

Initial medical preparedness and response guidelines for the civilian communities surrounding the chemical agent depots were provided by the CDC. As part of the CSEP Program’s ongoing efforts to improve medical preparedness and response, the CSEPP MIPT has developed revised medical guidelines. These guidelines do not supersede current medical or public health practices and requirements (e.g., precautions for handling bodily fluids). Local health and emergency management officials, working with Army personnel, must analyze the nature of possible releases at each location, determine what kinds of intoxication and what level of contamination might be possible, and match local or regional resources to the potential task.

These recommendations are designed to ensure medical preparedness for chemical agent emergencies. Included in the *CSEPP Medical Resource Guide* are two checklists, which are summaries of important questions to ask when evaluating medical preparedness in the civilian pre-hospital and hospital environments, entitled:

- *Emergency Medical Services CSEPP Medical Evaluation Guidance (EMS MEG)*⁶⁹ and
- *Hospital CSEPP Medical Evaluation Guidance (MEG)*.⁷⁰

The CSEPP medical program includes not only first responders such as police, fire, and EMS, but coordination of response and victim care with medical “first receivers.” First receivers may be located within the community (e.g., hospitals or clinics), on the depot, or at the weapons destruction facilities. The purpose of this section is to assist with planning for hospital (first receiver) and EMS (first responder) response to a CAI.

CSEPP Pre-Hospital Services (Emergency Medical Service)

Emergency Medical Services that would have a responsibility in a CSEPP event need to develop and maintain a medical readiness to competently respond in case of a CSEPP event. These services need to maintain the capabilities to treat and

⁶⁹ *Emergency Medical Services CSEPP Medical Evaluation Guidance (MEG)*. 2003. Available online at http://www.cseppportal.net/Secure/documents/Resources/Medical/General/CSEPP_EMS_MEG%20031103.pdf

⁷⁰ *Hospital CSEPP Medical Evaluation Guidance (MEG)*. 2003. Available online at http://www.cseppportal.net/Secure/documents/Resources/Medical/General/CSEPP_HOSP_MEG_031103.pdf

transport patients injured by a chemical agent event. Capabilities include but are not limited to appropriate equipment, supplies, training and participation in exercises.

CSEPP Hospitals

To develop and maintain medical readiness for chemical stockpile emergencies, CSEPP works with and provides resources to certain hospitals in the vicinity of chemical installations. These hospitals maintain capabilities to treat patients injured by chemical agent, including appropriate equipment, supplies, training, and participation in exercises. Such hospitals are referred to in the Program as CSEPP Hospitals.

CSEPP Hospitals may be designated by two different mechanisms: by the Army Chemical Installation through a Memorandum of Agreement as per *DA Pam 50-6*, or by the CSEPP Regional Field Office through a DHS/CSEPP approval process. Criteria for designation as a CSEPP Hospital may be found in the *CSEPP Medical Resource Guide*.

Other Healthcare Providers

In all CSEPP communities it is important to acknowledge that other “free-standing” medical facilities exist outside the hospital setting. Free-standing facilities may include “Insta-Care” walk in emergent clinics, public health clinics, rural health clinics, community health centers, Indian Health Service clinics, and private physician offices. Healthcare providers in these facilities are part of the CSEPP medical community and should be incorporated into the CSEPP medical concept of operations and receive periodic education on related issues.

Situations and Assumptions

Any chemical event will likely place a significant additional strain on local medical service providers, even if off-post areas are not affected by a release. If off-post populations are affected by a release, local medical service providers will have to provide specialized screening and care for large numbers of persons who may have been exposed to chemical agent.

The following conditions should be considered in developing CSEPP medical planning:

- The deliberate or accidental release of a chemical agent from a chemical storage facility may significantly impact local medical resources.
- Emergency medical, public health, and hospital services could be called upon to evaluate and treat a large number of actual or potential casualties.
- The chemical agent treatment and resources may be a significant extension of normal duties and will likely overwhelm the local medical and EMS community.

- Preparation for medical response should include written plans, policies, previously executed MOAs and procedures at CSEPP Hospitals.
- Care of chemical casualties may involve identification of agent, decontamination, administration of antidote (if appropriate), and definitive care.
- Chemical agent exposure may result in not only potential medical consequences, but also emotional and psychological sequelae.
- In case of chemical agent casualties, removal of remains (both human and animal) may need to be anticipated.

Medical Concept of Operations

Medical preparedness should be based on plans and procedures that detail the medical concept of operations and coordinated response actions to prepare for and respond to a CAI. These medical plans and procedures should be integrated with State and local emergency response plans and those of the Army installations. These plans should include anticipated response, necessary resources, and appropriate training. This concept should consider as a minimum the following factors:

- The continuum of victim care begins on-post or at any entry point into the medical system (which includes EMS) and continues until final patient disposition occurs;
- The number and type of potentially exposed individuals in the projected plume area;
- The implementation of protective action strategies (e.g., evacuation, sheltering, and collective protection);
- Medical screening, triage, appropriate treatment and transport to CSEPP Hospitals or medical facilities for exposed individuals, to include plans for administration of antidote where necessary;
- Strategies for the appropriate use of decontamination equipment;
- Procedures for decontamination of patients and emergency responders per OSHA standards;⁷¹
- Integration with existing hazardous material and/or CAI response plans, mass casualty incident plans, and other disaster plans;
- Strategies for incorporation of public health into community planning, response, and recovery efforts;
- Management of a CAI utilizing ICS; and
- Integration of a medical component into the JIS.

⁷¹ Applicable Federal, State and Local Regulations detailed in the Medical Resource Guide

Medical training should be included as part of existing State and local programs and should be coordinated as part of an all-hazards approach. Training should be structured to take advantage of existing Federal, State, local, and Army training programs. The *Medical Resource Guide* contains a list of CSEPP educational opportunities.

Decontamination Planning

It is important to distinguish between exposure and contamination. Outside the Army installation, it is unlikely that persons will become contaminated with chemical agent. Only a large fire involving explosively configured VX or mustard munitions would lead to the possibility of aerosol deposition (which could lead to contamination) off-post. Even in that scenario, the greater threat by far would be the vapor hazard. Thus, persons originating off-post who are exhibiting symptoms of agent vapor exposure are not likely to be contaminated.

In the rare case where persons originating off-post may have received agent contamination through aerosol deposition, proper decontamination will be necessary to prevent secondary contamination and chemical injury to medical and rescue personnel. Acceptable decontamination guidelines for persons who may have been exposed to chemical warfare agent are located in the *Medical Resource Guide*.

Authorities and References

Authorities

See appropriate CSEPP Plan or Annex.

References

See Medical Resource Guide.

Additional References

<http://www.cseppportal.net>

Chapter IV—Resource Management

A. Concepts and Principles

Emergency planning seeks to anticipate possible emergencies and the resources that will be needed during the emergency. Resources include personnel, teams, facilities, equipment, and supplies. Emergency planning identifies available resources as well as any resource shortfall so that the deficit can be eliminated or at least reduced. The resources must be systematically identified, committed to, and confirmed as part of the planning process. Planning should be carefully coordinated to ensure that resources are not overcommitted.

Resource management involves:

- Establishing systems for describing, inventorying, requesting, and tracking resources;
- Activating these standardized systems prior to and during an incident;
- Dispatching resources prior to and during an incident; and
- Deactivating or recalling resources during or after incidents.

Generally, resource management coordination activities take place within EOCs.

Concepts

The underlying concepts of resource management include the following:

- Provide a uniform method of identifying, acquiring, allocating, and tracking resources.
- Use a standardized classification of kinds and types of resources required to support the incident management organization through effective mutual aid and donor assistance.
- Use a credentialing system tied to uniform training and certification standards to ensure that requested personnel resources are successfully integrated into ongoing incident operations.
- Coordination is the responsibility of EOCs and/or multiagency coordination entities.
- Encompass resources contributed by government, private sector, and nongovernmental organizations.

Principles

The key principles for effective resource management include the following:

- Develop plans for managing and employing resources in a variety of possible emergency circumstances in advance of an incident.

- Use standardized processes and methodologies to order, identify, mobilize, dispatch, and track the resources required to support incident resource management activities in accordance with a request from the IC regarding planning requirements.
- Categorize resources by size, capacity, capability, skill, and other human characteristics. This makes the resource ordering and dispatch process within jurisdictions, across jurisdictions, and between governmental and nongovernmental entities more efficient and ensures that ICs receive resources appropriate to their needs.
- Develop formal pre-incident agreements (MOAs and MOUs) among all parties providing or requesting resources necessary to enable effective and efficient resource management during incident operations.
- Use validated practices to obtain resources to support operational requirements.
- Use management information systems to collect, update, and process data; track resources; and display their readiness status.
- Use protocols to request resources, prioritize requests, activate and dispatch resources to incidents, and return resources to normal status at demobilization.

B. Managing Resources

Emergency planning seeks to anticipate possible emergencies and the resources that will be needed at that time. It identifies available resources, as well as any resource shortfall, so that the deficit can be eliminated or at least reduced.

Any emergency response will initially depend primarily upon local resources to carry out its activities. Some resources, such as communications equipment and protective gear, can be acquired and stockpiled. Some vehicles can be pre-positioned; however, other resources, such as buses, ambulances, and mass care centers, cannot. These must be systematically identified, committed to, and confirmed as part of the planning process. Planning should ensure that resources are not over committed. Furthermore, the resources a jurisdiction has to operate its day-to-day emergency organization can differ markedly from those needed during a major emergency. Not only are demands on the emergency organization increased, but demands on other components of the jurisdiction may exceed local capabilities. The type of emergency will dictate to what degree this resource drain will occur. Unusual types of emergencies, unless carefully anticipated, could find the jurisdiction under-prepared.

During response and recovery from a chemical incident, there will be demands for resources that will exceed the available supply in the local and possibly state inventories. Prioritization is the task of assigning resources to a list of needs and weighing which needs are of greatest importance. The use of limited resources must be allocated to provide the greatest benefit, in terms of protecting life and

property, depending on the overall extent of the incident and input from the IC or pre-incident determinations of population size and levels of capabilities.

A chemical agent event is an example of an unusual emergency—it has special response and resource requirements not normally associated with more common emergencies, such as floods, windstorms, or most other hazardous materials accidents. For this reason, planning for resource coordination and allocation becomes especially critical and should be coordinated with respect to planning zones and their related protective actions.

Planning issues for resource coordination will vary somewhat from zone to zone.

Resource Management Process

The [NIMS](#), in order to implement the [NRP](#), defines standardized mechanisms and establishes requirements for processes to describe, inventory, mobilize, dispatch, track, and recover resources over the life cycle of an incident. The following steps will aid CSEPP organizations in constructing and using the necessary inventories.

Identifying and Typing Resources

Resource typing entails categorizing by capability the resources that incident managers commonly request, deploy, and employ. Measurable standards identifying the capabilities and performance levels of resources serve as the basis for categories. Resource kinds may be divided into subcategories (types) to define more precisely the resource capabilities needed to meet specific requirements. Resource typing is a process designed to facilitate frequent use and accuracy in obtaining needed resources.

Certifying and Credentialing Personnel

Personnel should go through a process of certification attesting that individuals meet professional standards for the training, experience, and performance required for incident management functions. A system of credentialing must be established to authenticate and verify the certification and identity of designated incident managers and emergency responders. This system would be used to help ensure that personnel representing various jurisdictional levels and functional disciplines possess a minimum common level of training, currency, experience, physical and medical fitness, and capability for the incident management or responder position that they are tasked to fill.

Inventorying Resources

Various resource inventory systems are necessary to assess the availability of assets provided by public, private, and volunteer organizations. All resources available for deployment in case of a chemical incident are included in the tracking systems maintained at local, tribal, State, regional, and national levels.

Resource managers must determine whether the local jurisdiction needs to warehouse items prior to an incident. This decision is based on consideration for

the urgency of the need, whether there are sufficient quantities of required items on hand, and/or whether they can be procured quickly enough to meet demand. Shelf life and maintenance considerations must also be taken into account in the decision to inventory critical items.

Identifying Resource Requirements

Resource managers must accurately identify (1) what resource is needed and in what quantity, (2) where and when the resource is needed, and (3) who will be receiving or using the resource. These resources include supplies, equipment, facilities, and incident managers and/or emergency responders. If resource requesters are not able to identify the needed item by type or classification system, resource managers must provide technical advice to enable user requirements to be defined and translated into a specification.

Ordering and Acquiring Resources

Resource items that are unavailable to the IC locally are submitted through the local EOC using standard resource-ordering procedures. If the local EOC is unable to fill the request, the request is forwarded to the next level—generally an adjacent EOC, State, regional, or multiagency coordination entity.

Mobilizing Resources

The mobilization of incident personnel must be tracked in the same system as any other resource. When they arrive on the scene, they will undergo on-scene processing and validation of credentials and the requester will receive notification of their arrival. Also identified in the resource management system are plans and preparations for demobilization of resources, as well as accountability, out-processing, and transportation to points of origin.

Tracking and Reporting Resources

Resource tracking systems are a standardized, integrated process conducted to provide incident managers with a clear picture of where resources are located; help staff prepare to receive resources; protect safety of personnel and security of supplies and equipment; and enable coordination of movement for personnel, equipment, and supplies. Resource managers establish procedures to track resources from mobilization through demobilization. Managers follow required procedures for acquiring and managing resources, including reconciliation, accounting, auditing, and inventorying.

Recovering Resources

Resource managers must plan for the final disposition of resources, whether nonexpendable or expendable—whether through refurbishment, replenishment, and disposal, or retrograde. Resources that require special handling and disposition (e.g., contaminated supplies, debris, and equipment) must be dealt with in accordance with established regulations and policies.

Reimbursement

Processes and procedures must be established to ensure that resource providers and public, private, and/or volunteer organizations are reimbursed in a timely manner. Mechanisms should provide for the collection of bills, validation of costs against the scope of the incident, proper authorization of expenditures, and assessment of reimbursement program requirements.

CSEPP-Specific Considerations

Throughout the planning effort, local officials also must include Federal and State government resources. However, except for law enforcement and some military resources, such as National Guard units, these will most likely be available during later parts of the response phase rather than during the initial stages. As these resources become available, staging areas will have to be activated to manage the arrival, storage, and distribution of these resources.

Arrangements for use of additional resources should be formalized as an MOA or MOU. An MOA is an understanding that specifies mutually agreed-upon expectations between two (or more) jurisdictions, to collaborate during specific events/incidents without exchange of funds. MOAs take many forms and may be referred to by other titles (e.g., MOUs). This may affect many different jurisdictions, as well as the private sector. What is needed in the planning process is a precise, detailed, and clear understanding on the part of all parties involved regarding arrangements for supply, procurement, and use and the time frames within which these can be accomplished.

Finally, good resource planning requires that resource lists—like the plan itself—be current, complete, accessible, and accurate. Plans should require that resource lists be reviewed regularly, preferably quarterly, or upon any significant changes. Use of computerized lists would be beneficial, but officials should have back-up, hard copies available, in case contingencies make computer operations unavailable.

Community Resource Planning

In developing a resource system, the following should be considered:

- Address resource management policies required to achieve the outcomes identified in *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program (Blue Book)*, Appendix C.⁷²
- Require reviewing resource lists at least quarterly and updating sooner as required.

⁷² Department of the Army and the Department of Homeland Security. CSEPP Emergency Outcomes and Exercise Evaluation Guides. Appendix C in *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program*. 7 September 2004.

- Catalog resources in such a way that the community's primary resources are clearly identified and distinguished from resources available through mutual aid or other agreements.
- List the location, type, and number of available resources whether public, private, or volunteer based; the name and phone number of the resource provider or controller; and written commitment of the resources.
- Require that hard copy resource lists be kept in addition to computerized lists.
- Include provision for periodic inventory and update of resource lists.
- Include provision for identifying and typing resources.
- Include provision for credentialing/certification for personnel
- Identify the type, number, and location of any specialized resources that the Army, National Guard units, or other Federal or State agencies will provide.
- Identify equipment needs and the resources to meet these needs on a zone-by-zone basis.
- Identify the special population resource needs on a zone-by-zone basis.
- Reference written agreements (MOAs and MOUs) governing use of resources not owned or controlled by the jurisdiction.
- Identify the major area-wide or regional sources of food, water, and other essentials likely to be needed during evacuation or re-entry if local sources are unusable.
- List sources of replacement vehicles, equipment, and machinery should contaminated items be unusable.
- Describe procedures for mobilizing resources.
- Describe procedures for ordering and acquiring resources.
- Designate staging areas for receiving, storing, and allocating supplementary resources, including emergency power and water sources.
- Describe procedures for tracking and recovering resources.
- Describe procedures for reimbursement.
- Assure that MOAs and MOUs address the requirements of the *CSEPP Memorandum of Agreement and Memorandum of Understanding (MOA/MOU) Guide*.⁷³

⁷³ Argonne National Laboratory. *CSEPP Memorandum of Agreement and Memorandum of Understanding (MOA/MOU) Guide*. Department of the Army and Federal Emergency Management Agency, May 1999.

Chapter V—Communications and Information Management

A. Alert and Notification

This section addresses the process by which notice and information about a chemical event is disseminated to higher Army authorities; other Federal authorities and agencies; State, tribal, and local authorities; media outlets; and the on-post and off-post populations believed to be at risk of exposure to chemical agent. It addresses the time-critical alert and notification functions that are the public's primary protection in the event of a chemical agent release. It also addresses required notifications to other governmental offices that are under environmental and Army regulations.

Chemical Event Notification Levels

A standard system for classifying chemical events is used to simplify and clarify emergency communications from the Army installation to the off-post community. Four Chemical Event Notification Levels (CENLs) are used in notifications:

- Non-surety Emergency;
- Limited Area Emergency;
- Post Only Emergency ; and
- Community Emergency

The CENLs are defined according to expected hazard, as shown in Table 3. Note that “chemical effects,” a term used in the table, may refer to AEGL-1 or AEGL-2, depending on local agreement.

Additional emergency notification levels may be appropriate within these levels at particular stockpile locations to account for unique local planning factors. When other levels are needed, they should be added within the four levels stated above, not substituted for any of them.

Table 3: Chemical Event Notification Levels

CENL	Definition
Non-surety Emergency	Events are likely to occur or have occurred that may be perceived as a chemical surety emergency or that may be of general public interest but which pose no chemical surety hazard. This includes non-surety material emergencies.
Limited Area Emergency	Events are likely to occur or have occurred that involve agent release outside engineering controls or approved chemical storage facilities with chemical effects expected to be confined to the chemical limited area.
Post Only Emergency	Events are likely to occur or have occurred that involve agent release with chemical effects beyond the chemical limited area. Releases are not expected to present a danger to the off-post public.
Community Emergency	Events are likely to occur or have occurred that involve agent release with chemical effects beyond the installation boundary.

Public Alert and Notification Terminology

Alert and notification are two separate steps: (1) attracting the attention of the public (alerting) and (2) providing specific, appropriate protective action instructions (notifying). Public education programs should stress this two-step process so that when alerted, people will listen for protective action instructions from designated notification systems.

The term “off-post warning point” or “warning point,” as used in this section, refers to an off-post location where warnings and PARs from the Army installation would be received. A warning point must be staffed to allow for person-to-person contact from the Army installation. Warning point staff must be able to either directly activate public alert and notification systems, or quickly contact those who can. There may be multiple warning points for multiple jurisdictions. A given jurisdiction may shift its warning point from one location to another during the course of emergency response (e.g., from a dispatch center to the EOC when the EOC is activated). In such cases, the plan and procedures should clearly describe the shift and how the Army installation is notified of it.

Public Alert and Notification Systems and Testing

The plan should include a description of the methods (systems) used to alert and notify the public in the event of a CAI. The primary alert and notification system for the IRZ (including the Army installation) should consist of a network of outdoor warning devices covering all populated areas of the zone, along with indoor devices in each regularly occupied building. The outdoor warning devices should be 360-degree electronic sirens with voice message capability. They should be designed to provide an alert signal of at least 10 decibels above ambient noise levels. Outdoor warning devices should cover all frequently occupied areas, including not only residential areas but also commercial, industrial, and recreational areas. Indoor devices should include TARs. These indoor and outdoor devices should be supplemented with other mechanisms as appropriate, such as

EAS broadcast messages, pagers, cellular telephones, crawl messages on cable television, mobile public address systems, route alerting, and/or text-display highway signs.

Alert and notification systems for the PAZ should include EAS and other means as needed to ensure that persons in the PAZ can receive alert and notification in a timely fashion to implement protective actions.

EAS procedures should be described, including:

- What radio and television broadcast stations and what cable operators will disseminate local emergency notifications; and
- How the EAS is activated and who (what positions) can activate it.

The IRZ and PAZ systems should be capable of disseminating protective action instructions to meet the time standards in Chapter III, Section B of this guidance document. All systems used for public alert and notification should be tested at least monthly.

Procedures for Community Emergency

Perhaps the single most important function of the CSEP Program is to ensure that procedures and systems are in place to provide timely alert and notification to the population at risk in the event of a CAI that affects the on-post and off-post population. This function should be carefully planned to allow for prompt action when time is of the essence. To that end, the following guidelines should be used in establishing alert and notification systems and procedures. These guidelines apply to any event known or expected to constitute a Community Emergency. (Note: Local authorities should also be notified of other CENLs, particularly if on-post sirens are sounded or personnel are evacuated from the site. The timing and manner of such notifications will be as negotiated between the Army and local authorities, consistent with Army guidelines.)

The two baseline standards below state that the Army installation will notify an off-post community warning point, and designated off-post personnel will activate public alert and notification systems. Guidelines for locations where installation personnel directly activate off-post alert and notification systems are presented immediately after the baseline standards below.

Standards Where Local Authorities Activate Public Alert and Notification

1. *Timing and content of warning and PAR for the IRZ to the off-post warning point.* The Army installation accident reporting system should be designed to provide a warning and PAR to the off-post community warning point(s) for the affected IRZ:

- Within five minutes at Anniston Army Depot (ANAD), Bluegrass Army Depot (BGAD), Newport Chemical Depot (NECD), and Pine Bluff Arsenal (PBA); and
- Within ten minutes at Pueblo Chemical Depot (PUCD), Desert Chemical Depot (DCD), and Umatilla Chemical Depot (UMCD).

The five or ten minute period begins when any individual who is responsible for identifying and reporting CAIs to the proper installation authority becomes aware of an event that might constitute a Community Emergency, and has the means to safely report it to the proper installation authority.⁷⁴ The five or ten minute period ends when the Army installation has provided the following information to the appropriate off-post warning point(s):

- The CENL;
- The identity of the agent and the predominant wind direction;
- The zones where the population is at risk; and
- An appropriate initial PAR (evacuate or SIP) for each affected zone in the IRZ.

2. *Alert signal and protective action instructions for the IRZ.* Systems and procedures should be in place to make a PAD and provide an alert signal and appropriate protective action instructions to the population in the affected zones of the IRZ within eight minutes of receipt of the warning and PAR from the installation. This eight-minute period begins when the installation's five or ten minute period ends (i.e., when the information in item 1 directly above has been transmitted and received)
3. *Alert and notification of the PAZ.* Alert and notification in the PAZ is equally important but slightly less time-critical. At all sites, in the event of a Community Emergency, the Army installation should provide PARs for the affected zones in the PAZ to the appropriate off-post warning point(s) within 10 minutes after a responsible individual becomes aware of the event. Procedures for generating and providing PARs for the PAZ may be combined with those for the IRZ. Off-post officials should activate available systems and initiate planned measures to alert and notify the PAZ public within eight minutes of receipt of PARs for the PAZ from the installation.

⁷⁴ For example, the responsible individual might be a security guard or chemical worker in the storage area or demilitarization facility. The proper installation authority would probably be an operator in the installation depot EOC. The EOC operator would then analyze the hazard based on the report, determine the protective action(s) to recommend to the off-post warning point, and provide the initial warning and PAR to the off-post warning point.

Standards Where Installation Assists with Activation of Public Alert and Notification

Due to the need for quick action, it may be prudent to arrange for direct activation of off-post alert and notification systems by the Army installation.⁷⁵ *DA Pamphlet 50-6*, Sec. 3-5.c(5) states: “Subject to local arrangements, [the Commander will] activate public warning systems and contact Emergency Alert System (EAS) stations to issue protective action instructions to the public, if a fast-breaking emergency does not allow time for civilian authorities to perform those functions.” Such arrangements must be requested by off-post authorities, and should be documented in an MOA that is included or incorporated by reference in both on-post and off-post plans. If the installation will activate off-post alert and notification systems, an alert signal and appropriate protective action instructions to the population in the affected zones which it is responsible for notifying should be provided within eight minutes of receipt of the report of the event by the proper installation authority, as described in the first standard listed above. The Army installation should then immediately notify the off-post warning point that it has activated the off-post alert and notification systems. The installation should then provide the off-post warning point(s) with the CENL, identity of agent, predominant wind direction, and appropriate initial PARs for all affected zones in the IRZ and PAZ within 10 minutes after a responsible individual becomes aware of the event. Off-post officials should activate available systems and initiate planned measures to alert and notify the public in all affected IRZ and PAZ zones within eight minutes of receipt of PARs from the installation.

Subsequent Notifications and Coordination

Once initiated, procedures to alert and notify the public (for example, sirens, TARS, and EAS) should continue at regular intervals in each affected zone, at least every 12 minutes for the first hour and every 20 minutes thereafter, until the danger to the public is determined to be past in that zone.

Plans for off-post jurisdictions should provide for notification to the Army installation of all PADs. In other words, the installation should be told when a PAD is made and implemented by off-post authorities, regardless of whether the PAD followed the installation’s PAR.

Sample Alert and Notification Timeline

Note: This example text description and timeline (see Table 4) assume that the installation has five minutes to complete alert and notification of the appropriate off-post warning points (rather than ten minutes, as some sites do).

⁷⁵ An Army Departmental Memorandum sets out conditions for Army direct notification and instruction to the public. Army direct notification and instruction may be performed if requested by local authorities and detailed in an MOA (Memorandum from DA DCSOPS for the Commander, AMC, Subject: CSEPP Public Alert and Notification Policy, dated 22 June 1994, w/1st Endorsement from AMC dated 15 July 1994). Direct activation of civilian warning systems is also provided for under DA Pam 50-6, Sec. 3-5.c(5).

Table 4: Sample Alert and Notification Timeline

Minutes	Event
0	Start point: Individual who is responsible for identifying and reporting CAIs to the proper installation authority becomes aware of an event that might constitute a Community Emergency, and has the means to safely report it to the proper installation authority.
5	Initial verbal warning, information, and PAR provided to appropriate community warning points for IRZ. (Includes CENL, identity of agent, zones at risk, and initial PAR for each affected zone in the IRZ.)
10	Follow-up IRZ PAR written notification sent to appropriate community warning points.
10	Initial PAR provided verbally to community warning points for PAZ. (Zones at risk and initial PAR for each affected zone in the PAZ.)
13	Community has sounded warning sirens and provided initial PAD for affected IRZ zones via TARs and EAS.
15	Follow-up PAZ PAR written notification sent to community warning points.
18	Community has activated available systems and initiated planned measures to alert and notify affected PAZ public.
25	Community repeats sirens/TARs/EAS message for IRZ (and every 12 minutes thereafter for first hour, then every 20 minutes).

Warning Point Communications and Protocol

The plan should describe procedures and equipment used for notifying the off-post warning point(s), including the following:

- Separate, dedicated primary and backup communication links between the Army installation EOC and off-post warning point(s);
- Daily testing of all dedicated links; and
- A verbal report of the event and associated information (e.g., CENL, agent, wind direction, and PARs for each affected zone) to off-post warning points as the primary notification, which is then confirmed by transmission of a hard copy of the information via e-mail or fax. The plan should provide for the hard copy to be sent to the warning points within five minutes of the verbal notification. Automated electronic systems may also be used as the primary means of reporting the event and associated information to off-post warning points, provided that the systems are always on and are monitored continuously by trained operators at all off-post warning points, and that verbal confirmation of the report is accomplished immediately after the broadcast of the electronic notification.

Arrangements for a “heads-up call” (a brief initial report to the off-post warning point that a chemical event has occurred, without details or PAR) may be

negotiated locally. However, planners should ensure that such a call does not interfere with the process of public alert and notification.

Format and Content of Notifications to the Public

Because of the importance of correct and timely protective actions and the limited warning time that may be available, instructional messages should be prerecorded or pre-scripted (i.e., written out ahead of time) to cover all plausible conditions and circumstances. Instructions should include a brief statement of the authority for the message, the nature of the threat, specific protective actions to be taken by the public, and the area(s) to which the instructions apply. Areas should be described in terms of familiar landmarks and boundaries. Instructional messages should refer to public education materials that have been distributed to the community, and the protective action instructions in the messages should be consistent with the content of the public education materials. However, instructional messages should not rely on the public's ability to find and read the previously distributed public education materials in an emergency.

EAS equipment may place a practical limit on message length. Federal Communications Commission (FCC) regulations for EAS equipment require a capability to record and store messages of up to two minutes in length.⁷⁶ The equipment in use generally fulfills this requirement but does not exceed it. Prescribed instructional messages should stay within the length that can be accommodated by local EAS equipment.

Subsequent Alert and Notification

Guidance for plans and procedures to make timely initial alert and notification discussed above also apply to critical updates as conditions and circumstances change. For example, during the response to the chemical event, information may be obtained that changes the initial estimate of the amount of chemical agent released. That in turn may lead to changes in the recommended protective actions for certain zones. Similarly, during the response to the chemical event, another event may occur that places additional zones at risk. In such cases the time standards for warning, PAR, and alert and notification apply to the new PARs and new instructions to the public.

Also, alert and notification concerning when and how to end SIP in all zones where a population was instructed to take any initial protective action (evacuate or SIP) needs to be done in sufficient time to enable the population to end SIP to avoid fatalities to the maximum extent practicable.

⁷⁶ 47 CFR 11.33(a)(3)(i)

Special Populations

The alert and notification system should include the means to alert and notify special populations. Potential measures to consider include:

- Placement of TARs and/or other emergency-activated communication devices in institutions that house special populations;
- Providing public notifications in languages other than English where there are significant non-English-speaking populations (emergency instructions should be translated into a foreign language if the state determines through survey or other means that one percent or more of the population at risk speaks that language but does not speak English); and
- Making mechanisms available to sensory-impaired individuals (e.g., vibration devices, flashing lights and teletype devices for the hearing impaired) to allow them to receive emergency instructions in a timely manner.

Other Notification Requirements

A CAI triggers numerous notification requirements under Federal law and Army regulations. Planners should be aware of these requirements and the Army's responsibilities under them. In particular Army procedures require notification to:

- The Local Emergency Planning Committee and State Emergency Response Commission (LEPC/SERC);
- The National Response Center (NRC);⁷⁷
- Army Operations Center (AOC);⁷⁸ and
- Public affairs offices at the U.S. Army Chemical Materials Agency (CMA), Army Materiel Command (AMC), and HQDA.⁷⁹

Restrictions on Release of Information in Suspected Terrorism or Criminal Events

Criminal or terrorist activity or loss of chemical agent or munitions is not to be reported to the public without approval by HQDA, specifically the Director, Strategy, Plans and Policy, Deputy Chief of Staff for Operations and Plans.⁸⁰ This restriction is not intended to prevent alert and notification of the public when there is a danger to the community, but only to delay transmission of information regarding the criminal or terrorist origins of the event. In other words, if a

⁷⁷ Commanders must report the release of any chemical agent material to the LEPC and the NRC. In CONUS, installations will notify State and local committees. The IRF commander at the CAI site notifies the NRC, with the AOC providing backup notification. DA Pam 50-6, Sec. 3-5.c.(4)(b).

⁷⁸ Headquarters, Department of the Army. *AR 50-6: Chemical Surety*. Washington, D.C.: HQDA, 26 June 2001. Sec. 11-3.a

⁷⁹ Headquarters, Department of the Army. *AR 360-1: Army Public Affairs Program*. Washington, D.C.: HQDA, 15 Sept. 2000. Sec. 12-7.

⁸⁰ Headquarters, Department of the Army. *DA Pamphlet 50-6: Chemical Accident and Incident Response and Assistance (CAIRA) Operations*. Washington, D.C.: HQDA, 26 March 2003. Para 11-5.b

chemical incident that poses a danger to the public is the result of criminal or terrorist action, the public should still be immediately notified and given protective action instructions, but information regarding the cause of the incident should not be distributed until the appropriate approval is obtained.

B. Methods for Evaluating Communication and Information Systems

CSEPP organizations should conduct annual assessments of critical CSEPP communications and information management systems. Specific guidelines for this review may be found in the *CSEPP Communications and Warning Systems Technical Review and Assessment Guide*.⁸¹ This document serves as a tool for assessing all critical CSEPP communications and warning systems. Critical CSEPP communications and warning systems are those systems required for notification, coordination, and/or public warning due to a CSEPP incident or accident.

CCWSTRAG covers 22 different CSEPP communications and warning elements, listed below in CSEPP Communications and Warning Elements. Annual testing is required of all *CCWSTRAG* system elements applicable in a specific CSEPP area. System elements that do not pass each review and assessment item and sub-item of *CCWSTRAG* should be scheduled for corrective maintenance or replacement as soon as practical.

CCWSTRAG is designed for annual use. The purpose of the guide is to verify proper operation and maintenance of physical and electrical characteristics. *CCWSTRAG* identifies limiting and/or potentially limiting factors for immediate correction.

Annual Assessment

A copy of the completed annual *CCWSTRAG* should be sent to the appropriate CSEPP Regional Field Office. The CSEPP Regional Field Office should review the guide and forward a summary report with observations and recommendations to DHS/CSEPP HQ.

A copy of each *CCWSTRAG* annual technical review and assessment should be retained in a central file for review and reference for a minimum of seven years. These records and applicable notations should be available for review by the DHS representatives.

⁸¹ Department of Homeland Security. *CSEPP Communications and Warning Systems Technical Review and Assessment Guide*. 2004.

Each annual assessment should include the following:

- Notation(s) of non-compliant items found
- Decision on corrective action(s)
 - Change in procedure(s)
 - Recommendation for repair
 - Recommendation for replacement
 - Other corrective action
- Date of correction
- Chronic problem list
 - Recommendations for repair or replacement of other system items
 - Referral to appropriate CSEPP regional field office and DHS/CSEPP Headquarters

All identified non-compliant items should be reviewed by the using agency. Maintenance, repair, and/or replacement should be immediately scheduled. Individual alert siren sites that require maintenance, repair, and/or replacement should be re-evaluated to verify compliant operation.

CSEPP Communications and Warning Elements

The 24 items listed below are the critical CSEPP communications and warning elements covered in the *CCWSTRAG*. Annual testing is required of all *CCWSTRAG* system elements applicable in a specific CSEPP area.

1. Alert sirens
2. Computers
3. Computer network assets
4. Telephone systems
5. Teleconference bridges (telephone and televideo)
6. TARs
7. Message reader boards
8. Dispatch/control console systems
9. Microwave/optical fiber infrastructure
10. Amateur Radio Emergency Services (ARES)/Radio Amateur Civil Emergency Service (RACES)
11. Two-way radio systems
12. Electrical power
 - a. Commercial power

- b. Emergency power
- 13. FCC licenses and station files
- 14. MOU
- 15. Communications site facilities
- 16. Communications site leases
- 17. Contracts—equipment maintenance, roads, and miscellaneous services
- 18. Administration
 - a. Normal day-to-day operation
 - b. Emergency operation
- 19. Budget
 - a. Annual operating budget
 - b. Future planning
- 20. Special equipment
 - a. Bucket trucks
 - b. Specialized vehicles
- 21. Equipment inventories
- 22. Chronic problems
- 23. Wireless capabilities
 - a. Pagers
 - b. Cellular telephones
 - c. Wi-Fi
 - d. Miscellaneous wireless capabilities
- 24. Interoperability of communications systems

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Chapter VI—Supporting Technologies

A. Supporting Incident Management with Science and Technology

Technology and technological systems provide supporting capabilities essential to continuously refining the CSEP Program. These include voice and data communications systems and information management systems, such as data display systems and modeling and decision support systems. These also include specialized technologies that facilitate incident operations and incident management activities in situations that call for unique technology-based capabilities.

Several principles should be adhered to regarding the use of technology within the CSEPP community to ensure validity under NIMS. Systems should maintain interoperability and compatibility and be able to work together without interfering with one another as the multiple jurisdictions, organizations, and functions involved prepare and respond. Technology standards and support systems should be in place to facilitate incident operations and sustain research and development (R&D) programs for future Program needs. Scientific support and technologies should be identified, developed, and mobilized to support Program activities. In addition, performance measures for technological systems should be determined and data should be collected to validate and revise the performance standards.

Various activities that could be addressed through the use of technology or technological systems include:

- Gathering, analyzing, and disseminating of intelligence and information;
- Managing the planning process;
- Developing and compiling the Incident Action Plan;
- Managing the activities of the various responders, including technical specialists;
- Developing plans for demobilization as the incident winds down; and
- Maintaining incident documentation tracking resources assigned to the incident.

Incident management within NIMS ICS requires:

- Accountability, including clear chains of command and supervision;
- Good communication, including efficient use of available communications systems without conflicting codes and terminology;
- An orderly, systematic planning process;

- Common, flexible, predesigned management structure that enables Commanders to delegate responsibilities and manage workloads efficiently; and
- Predefined methods to integrate interagency requirements into the management structure and planning process effectively.

Capabilities to be provided by emergency management automation systems developed for CSEPP should address the following issues:

There will be a continuous exchange of information between the installation and affected parties to coordinate planning, exercise, response, and recovery actions. During an event notification, there will be an immediate exchange of information followed by positive “man-in-the-loop” confirmation.

The automation system will be used for both daily operations and emergencies.

All essential resources will be identified, preassigned, and, if necessary, contracted for in advance.

In addition to the automation system, there will be an alternate means of communication between the on-post EOC and a local point of contact that can be used to alert the local off-post EOC of an imminent notification.

Communications Systems

Throughout all phases of CSEPP operations, good communications are vital. Communication becomes more critical during an incident as response decisions and activities are shared with response forces, other organizations, and the public. Because of the time-critical nature of these actions, automation can provide particularly important assistance. Execution of procedures (e.g., activation of the chemical event emergency notification system, notification of key personnel, selection of appropriate protective actions, alert and notification of the public) can be completely automated or can be prompted by automatic messages to human actors. Computer systems can promote efficient communications through automatic dialing, and message logging as well as by providing an avenue for the exchange of information in electronic form. Emergency management automation systems can assume much of the burden associated with documenting decisions and actions taken, allowing key personnel to concentrate on the response itself.

Information Management Systems

Information management systems collect, store, and organize data to provide decision makers with selective data and reports to assist in monitoring and controlling the projects, resources, activities, and results. Automated Information Systems (AIS) can provide important assistance in performing many of the planning functions described in this document. The quickness with which a chemical agent release could affect on-post and off-post populations argues

strongly in favor of using automated tools to help perform complex analyses during planning and managing the deployment of personnel and resources for response efforts. AIS can play an important role in all phases of an emergency. Automation can assist in the development of plans and procedures by organizing information on response personnel and resources so that it can be rapidly recalled and acted upon during the response phase.

State and local jurisdictions are strongly encouraged to make maximum use of automation tools that have been developed for CSEPP, as well as evaluating tools that are currently being developed. Just as the ongoing development of science and technology is integral to the continual improvement and refinement of NIMS, it is also important to CSEPP planning. It is essential that planners maintain an appropriate focus on science and technology solutions. Doing so will require a long-term collaborative effort within the CSEPP planning community. As new tools are developed they should be rapidly evaluated and integrated into operations if they are found to be of worth.

Modeling and Decision Support Systems

Computerized tools will be especially valuable in performing complex modeling (including dispersion, protective action, and evacuation modeling) to assist planners and decision makers in developing the most effective protective action and response strategies. Emergency response procedures can be input into an automated system where their adequacy and comprehensiveness can be tested and they can be organized for quick activation during an emergency. In addition, activities include routine operations such as meteorological and chemical agent monitoring, which can also be automated to ensure that significant changes in conditions are recognized quickly and acted upon appropriately.

Automation can assist in these efforts through organizing and analyzing the data collected and running models to identify the extent of the area affected and the degrees to which various portions of this area have been impacted. The results will help decision makers determine what actions, if any, are needed to return the area to normal and when people may safely return to affected areas.

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Chapter VII—Ongoing Management and Maintenance

A. Implementing Procedures

Each organization covered by the EOP or CAIRA plans should develop procedures that translate the tasking to that organization into specific action-oriented checklists for use during emergency response. The procedures should be documented with checklists and should include resource listings, maps, charts, and other pertinent data as appropriate. Procedures should generally cover mechanisms for notifying staff; processes for obtaining and using equipment, supplies, and vehicles; methods of obtaining mutual aid; mechanisms for reporting information to organizational work centers and EOCs; and communications operating instructions, including communications with private-sector and nongovernmental organizations. There are four standard levels of procedural documents:

- Overview—a brief concept summary of an incident-related function, team, or capability.
- Standard Operating Procedure (SOP) or Operations Manual—a complete reference document that details the procedures for performing a single function or a number of interdependent functions.
- Field Operations Guide (FOG) or Handbook—a durable pocket or desk guide that contains essential information required to perform specific assignments or functions.
- Job Aid—a checklist or other aid that is useful in performing or training for a job.

B. Plan Review and Update

Each CSEPP plan should be reviewed regularly and revised as necessary. The plan should specify which official(s) will be responsible for performing periodic reviews and updates. At a minimum, the plans should be reviewed and revised as appropriate following each CSEPP exercise to incorporate lessons learned. Plan updates should include changes based on:

- Routine updates to information that often changes (e.g., telephone numbers, email and web site addresses, and lists of resource providers)
- Lessons learned in exercises, drills, and real-event responses. These may include Corrective Actions based on exercise Findings Requiring Corrective Action (FRCAs) (see *Exercise Policy and Guidance for the Chemical Stockpile Emergency Preparedness Program (Blue Book)*, June 2004, sec. 3.3.6). However, any important lessons learned during exercises and drills should be incorporated, regardless of whether there was an associated FRCA.

- Significant demographic changes in the community (e.g., growth in population)
- Technological developments (e.g., adoption of new communications or hazard assessment technology)
- Changes in the chemical event hazard due to destruction of certain types of weapons or containers, or changes to stockpile management practices
- Changes to applicable Federal, State, and/or local laws, rules, regulations, executive orders, or other requirements documents
- Changes in other organizations' plans
- Adjustments needed for NIMS compliance or compatibility with the NRP
- Any other significant changes that could affect emergency planning

Figure 4 illustrates the cycle of planning, exercising, and revision based on lessons learned.

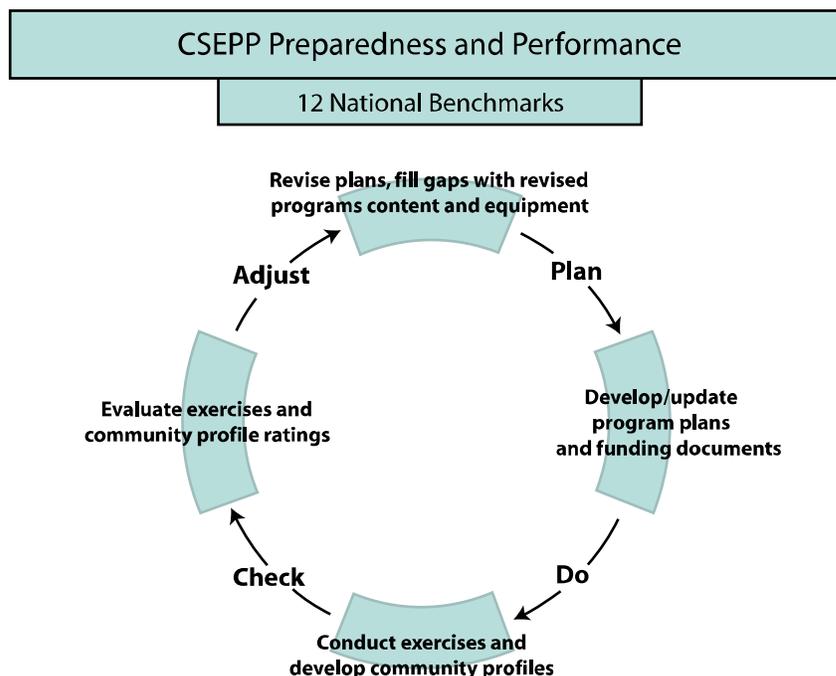


Figure 4: CSEPP Preparedness and Performance

The plan should include a method (e.g., a signature page) to document that regular reviews and updates have been performed.

Acronym and Abbreviation List

AC	Area Command
ACP	Access Control Point
AEGL	Acute Exposure Guideline Level
AEC	Army Environmental Center, Aberdeen Proving Ground, Maryland
AEL	Airborne Exposure Limit
AIS	Automated Information System
AMC	Army Materiel Command
ANAD	Anniston Army Depot
ANCA	Anniston Chemical Activity
AOA	American Osteopathic Association
AOC	Army Operations Center
ARC	American Red Cross
ARES	Amateur Radio Emergency Services
AVMA	American Veterinary Medical Association
BGAD	Bluegrass Army Depot
BGCA	Bluegrass Chemical Activity
CAI	Chemical Accident or Incident
CAIRA	Chemical Accident or Incident Response and Assistance
CAR	Capability Assessment for Readiness
CCWSTRAG	CSEPP Communications and Warning Systems Technical Review and Assessment Guide
CDC	Centers for Disease Control and Prevention
CENL	Chemical Event Notification Level
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
CFR	Code of Federal Regulations
CHPPM	Center for Health Promotion & Preventive Medicine
CMA	Chemical Materials Agency
CMS	Centers for Medicare & Medicaid Services
CONPLAN	Concept of Operations Plan
CONUS	Continental United States

CSDP	Chemical Stockpile Disposal Program
CSEPP	Chemical Stockpile Emergency Preparedness Program
CY	Calendar Year
DA	Department of the Army
DCD	Deseret Chemical Depot
DHS	Department of Homeland Security
DOC	Department of Commerce
DoD	Department of Defense
DOE	Department of Energy
DOI	Department of Interior
DOJ	Department of Justice
DOL	Department of Labor
DOS	Department of State
DOT	Department of Transportation
EAS	Emergency Alert System
ECA	Edgewood Chemical Activity
EIS	Environmental Impact Statement
EMAC	Emergency Management Assistance Compact
EMS	Emergency Medical Service
EMT	Emergency Medical Technician
EMTALA	Emergency Medical Treatment and Active Labor Act
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
EPZ	Emergency Planning Zone
ERPS	Emergency Response Planning Scenario
ESF	Emergency Support Function
FBI	Federal Bureau of Investigation
FCC	Federal Communication Commission
FCO	Federal Coordinating Officer
FEMA	Federal Emergency Management Agency
FFO	First Federal Official

FOG	Field Operations Guide
FORSCOM	Forces Command
FOSC	Federal On-Scene Coordinator
FRC	Federal Resource Coordinator
FRCA	Findings Requiring Corrective Action
FRERP	Federal Radiological Emergency Response Plan
FRP	Federal Response Plan
FY	Fiscal Year
GPL	General Population Limit
HAZMAT	Hazardous Materials
HAZWOPER	Hazardous Waste Operations and Emergency Response
HHS	Department of Health and Human Services
HCFA	Health Care Financing Administration, now known as the Centers for Medicare & Medicaid Services (CMS)
HQDA	Headquarters, Department of the Army
HSPD	Homeland Security Presidential Directive
IC	Incident Commander
ICS	Incident Command System
IDLH	Immediately Dangerous to Life or Health
IIPT	Integrating Integrated Process Team
IPE	Integrated Performance Evaluation
IPT	Integrated Process Team
IRF	Initial Response Force
IRP	Installation Restoration Plan
ISSA	Interservice Support Agreement
IRZ	Immediate Response Zone
ITP	Individual Training Plan
JCAHO	Joint Commission on Accreditation of Healthcare Organizations
JFO	Joint Field Office
JIC	Joint Information Center
JIS	Joint Information System
LEPC	Local Emergency Planning Committee

MAA	Mutual Aid Agreement
MCC	Movement Control Center
MCE	Maximum Credible Event
MEG	Medical Evaluation Guidance
MIPT	Medical Integrated Process Team
MOA	Memorandum of Agreement
MOU	Memorandum of Understanding
MQIT	Medical Quality Improvement Team
NAC	National Advisory Committee
NCP	National Contingency Plan
NECD	Newport Chemical Depot
NEMA	National Emergency Management Agency
NIC	NIMS Integration Center
NIMS	National Incident Management System
NIMCAST	NIMS Capability Assessment Support Tool
NCS	National Communications System
NRC	National Response Center
NRP	National Response Plan
NRT	National Response Team
NSEPT	National Security and Emergency Preparedness Telecommunications
NSTAC	National Security Telecommunications Advisory Committee
ODCSOPS	Office of the Deputy Chief of Staff, Operations and Plans
ORNL	Oak Ridge National Laboratory
OSHA	Occupational Safety and Health Administration
PAD	Protective Action Decision
PAO	Public Affairs Officer
PAR	Protective Action Recommendation
PASP	Protective Action Strategy Plan
PAZ	Protective Action Zone
PBA	Pine Bluff Arsenal
PBCA	Pine Bluff Chemical Activity

PDCA	Plan, Do, Check, Adjust
PFO	Principal Federal Official
PIO	Public Information Officer
POC	Point of Contact
PPE	Personal Protective Equipment
PUCD	Pueblo Chemical Depot
RACES	Radio Amateur Civil Emergency Service
R&D	Research and Development
RRCC	Regional Response Coordination Center
SARA	Superfund Amendments and Reauthorization Act
SBA	Small Business Administration
SBCCOM	Soldier and Biological Chemical Command
SERC	State Emergency Response Commission
SIP	Shelter-in-Place
SO	Safety Officer
SOP	Standard Operating Procedure
SRF	Service Response Force
STEL	Short-Term Exposure Limit
TAR	Tone Alert Radio
TCP	Traffic Control Point
TDD	Telecommunications Device for the Deaf
UAC	Unified Area Command
UASI	Urban Area Security Initiative
UC	Unified Command
UMCD	Umatilla Chemical Depot
USACHPPM	U.S. Army Center for Health Promotion and Preventive Medicine
VA	Department of Veterans Affairs
WIPT	Working Integrated Process Team
WPL	Worker Population Limit

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Glossary

Acute Exposure Guideline Levels (AEGLs)—are developed by the National Research Council’s Committee on Toxicology. The criteria take into account sensitive individuals and are meant to protect nearly all people. The guidelines define the following three-tiered AEGLs:

AEGL 1: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience notable discomfort, irritation, or certain asymptomatic nonsensory effects. However, the effects are not disabling and are transient and reversible upon cessation of exposure.

AEGL 2: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience irreversible or other serious, long-lasting adverse health effects or an impaired ability to escape.

AEGL 3: The airborne concentration of a substance above which it is predicted that the general population, including susceptible individuals, could experience life-threatening health effects or death.

Each of the three AEGLs (AEGL-1, AEGL-2, and AEGL-3) are developed for each of five exposure periods: 10 minutes, 30 minutes, 1 hour, 4 hours, and 8 hours. ALOHA, however, will only use an AEGL exposure period of 10 minutes.

Access Control Point (ACP)—a location staffed to restrict the entry of unauthorized personnel into a risk area. Access control is normally performed just outside of the risk area. It involves the deployment of vehicles, barricades, or other measures to deny access to a particular area.

Accident Assessment—the evaluation of the nature, severity, and impact of an accident. In CSEPP, the Army will be primarily responsible for accident assessment.

Alert and Notification System—a combination of sirens and tone alert radios to be used in the immediate response zone and selected portions of the protective action zone to provide alert and emergency instructions to the public.

Blister agent—see vesicant agent.

Casualty—any person who is declared dead or is missing, ill, or injured (NRP).

Catastrophic Incident—any natural or manmade incident, including terrorism, that results in extraordinary levels of mass casualties, damage, or disruption severely affecting the population, infrastructure, environment, economy, national morale, and/or government functions. All catastrophic events are Incidents of National Significance (NRP).

Chemical Accident/Incident (CAI)—unintentional chemical event where chemical agent is released into the ambient atmosphere and either threatens unprotected personnel or has the potential to threaten unprotected personnel. It includes chemical accidents resulting from non-deliberate events where safety is of primary concern, and chemical incidents resulting from deliberate acts or criminal acts where security is of concern (DA PAM 50-6).

Chemical Accident and Incident Response and Assistance (CAIRA) Plan—a Federal plan (DA Pam 50-6; Headquarters, Department of the Army, 2003) that defines the Federal response at an Army installation, which is the emergency response to and recovery from a chemical event. This plan must be coordinated carefully with local and State plans.

Chemical Agent (military term)—a chemical substance that is intended for use in military operations to kill, seriously injure, or incapacitate a person through its physiological effects. Excluded from consideration are riot control agents, chemical herbicides, smoke, and flame.

Chemical Demilitarization Program (CDP)—the overall DoD program that is responsible for eliminating all stockpile and non-stockpile chemical agents, munitions, and related materials in U.S. states and territories. This program includes the Chemical Stockpile Disposal Program, the Alternative Technologies and Approaches Project, the Non-Stockpile Chemical Materiel Product, the Chemical Stockpile Emergency Preparedness Program, and the Assembled Chemical Weapons Alternatives Program.

Chemical Event (military term)—a term used by the military that deals with chemical accidents or incidents that involve chemical surety materiel. It includes (1) chemical accidents resulting from nondeliberate events where safety is of primary concern and (2) chemical incidents resulting from deliberate acts or criminal acts where security is a concern.

Chemical Event Emergency Notification System—a tiered system whereby the Army classifies chemical surety emergencies according to expected downwind hazard distance and provides appropriate notification to off-post public officials. The system consists of a minimum of three surety emergency levels (based on the predicted downwind distance of the no-effects dosage) and one non-surety event level.

Chemical Limited Area—see limited area.

Chemical Stockpile Disposal Program (CSDP)—the congressionally mandated program that requires the Army to dispose of all its unitary chemical agents. The preferred mode of disposition is on-post incineration.

Chemical Stockpile Emergency Preparedness Program (CSEPP)—a joint Army/DHS program designed to enhance existing local, installation, tribal, State, and Federal capabilities to protect the health and safety of the public, work force, and environment from the effects of a chemical accident or incident involving the U.S. Army chemical stockpile.

Chemical Surety (military term)—those controls, procedures, and actions that contribute to the safety, security, and reliability of chemical agents and their associated weapon systems throughout their life cycle without degrading operational performance.

Complete Personal Decontamination—refers to washing the entire body with soap and water and a complete change of clothing.

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)—a Federal law (P.L. 96 - 5 1 0) that deals with hazardous substance releases into the environment and the cleanup of hazardous waste sites. This act was amended by the Superfund Amendments and Reauthorization Act (SARA) in 1986.

Contamination—chemical agent (typically in liquid form; including droplets and/or aerosols) deposited on skin, clothing, or any other material that constitutes a source of potential agent exposure until it is neutralized, removed, or degrades naturally. (Compare to Exposure.)

CSEPP Community—the combined area of one military installation, its surrounding local jurisdictions, and the State agencies involved in executing CSEPP for that area.

CSEPP Hospital—a hospital in the vicinity of a chemical installation that has been designated for participation in the CSEP Program by the CSEPP regional field office.

CSEPP Jurisdiction—the smallest area of geography within which political authority may be exercised with regards to CSEPP (e.g., a county or city).

D2-Puff—an air dispersion model developed by the Army to estimate downwind hazard distances from atmospheric releases of chemical agents.

Decibel (dB)—a measure of sound pressure, which determines loudness. The abbreviation, “dB,” is often followed by an “A,” “B,” or “C” to indicate the method used to weight sound frequencies when measuring sound pressure levels.

Decontamination (military term)—the process of decreasing the amount of chemical agent on any person, object, or area by absorbing, neutralizing, destroying, ventilating, or removing chemical agents.

Direction and Control Exercise—an activity in which emergency preparedness officials respond to a simulated incident. It mobilizes emergency management and communications organizations and officials. Some field response organizations may be involved.

Demilitarization—the mutilation, destruction, or neutralization of chemical surety materiel, rendering it harmless and ineffectual for military purposes.

Dermal Exposure—contact with, or absorption through, the skin.

Disaster—see Major Disaster.

Dislodgeable Residues—Environmental Protection Agency terminology for that portion of total commercial pesticide residue on vegetation that can be readily removed and so serve as a source of dermal exposure, as distinguished from airborne residues.

Dry Decontamination—refers to removing the outer layer of clothing, washing exposed skin and hair with soap and water, and providing a suitable replacement for outer clothing

Dose—the quantity of agent absorbed by the body. Often expressed in mass units of agent per body weight or surface area exposed (e.g., mg or mg/kg). (Compare to Exposure.)

Emergency—as defined by the Stafford Act, any occasion or instance for which, in the determination of the President, Federal assistance is needed to supplement State and local efforts and capabilities to save lives and to protect property and public health and safety, or to lessen or avert the threat of a catastrophe in any part of the United States (NRP).

Emergency Alert System (EAS)—a system created by the Federal Communications Commission as a means of using communications facilities to alert the public of emergencies. The EAS requires participation by cable TV systems in addition to broadcast stations, and encourages the voluntary participation of satellite carriers, Direct Broadcast Satellite vendors, and public service providers. It also establishes new technical standards and operational procedures.

Emergency Operations Center (EOC)—the physical location at which the coordination of information and resources to support domestic incident management activities normally takes place. May be a temporary facility or located in a more central or permanently established facility (NRP).

Emergency Operations Plan (EOP)—the “steady-state” plan maintained by various jurisdictional levels for managing a wide variety of potential hazards (NRP).

Emergency Planning Zone (EPZ)—a geographical area delineated around a potential hazard generator that defines the potential area of impact. Zones facilitate planning for the protection of people during an emergency.

Evacuation—organized, phased, and supervised withdrawal, dispersal, or removal of civilians from dangerous or potentially dangerous areas, and their reception and care in safe areas (NRP).

Enhanced Shelter-in-Place—a protective action that is similar to normal shelter-in-place except that it involves taking shelter in a structure to which weatherization techniques have been applied before the emergency to permanently reduce the rate at which air or chemical agent seeps into the structure. Effectiveness is improved by going into an interior room. The shelter should be opened up or abandoned after the toxic plume has passed.

Evacuation—a protective action that involves leaving an area of risk until the hazard has passed and the area is safe for return.

Exclusion Area (military term)—the area immediately surrounding one or more receptacles in which chemical agents are contained. Normally, the boundaries of an exclusion area are the walls, floor, and ceiling of a storage structure, secure container, or a barrier that establishes the boundary (e.g., an igloo or fence).

Expedient Shelter-in-Place—a protective action that is similar to normal shelter-in-place except that, after going into the room selected as a shelter at the time of the emergency, the inhabitants take measures to reduce the rate at which air or chemical agent enters the room. Such measures would include taping around doors and windows and covering vents and electrical outlets with plastic. Effectiveness is improved if the room selected as a shelter is an interior room. The shelter should be opened up or abandoned after the plume has passed.

Exposure—contact by a person or animal with chemical agent in either liquid or vapor form through inhalation, contact with eyes or the skin, or ingestion of contaminated food or water. Exposure to agent in liquid form (including droplet and/or aerosol form) can result in contamination. (Compare to Contamination.)

Federal On-Scene Coordinator (FOSC or OSC)—the Federal official predesignated by the EPA or the USCG to coordinate responses under subpart D of the NCP, or the government official designated to coordinate and direct removal actions under subpart E of the NCP (NRP).

First Federal Official (FFO)—the first Federal representative of a participating agency of the National Response Team arriving at the scene of discharge or release. The FFO coordinates activities under the National Contingency Plan.

First Responder—local and nongovernmental police, fire, and emergency personnel who, in the early stages of an incident, are responsible for the protection and preservation of life, property, evidence, and the environment, including emergency response providers as defined in section 2 of the Homeland Security Act of 2002 (6 USC 101), as well as emergency management, public health, clinical care, public works, and other skilled support personnel (e.g., equipment operators) who provide immediate support services during prevention, response, and recovery operations. First responders may include personnel from Federal, State, local, tribal, or nongovernmental organizations (NRP).

Full-scale Exercise—an activity in which emergency preparedness officials respond to a simulated incident. It mobilizes the entire emergency organization or its major parts.

GA—see nerve agent.

GB—see nerve agent.

H—see mustard agent.

HD—see mustard agent.

Hospital Environments—term used in medical preparedness guidelines referring to the hospital emergency department plus any outdoor areas on the hospital grounds that might be used for triage and decontamination during a chemical agent emergency, as well as other hospital departments that might support the hospital's response.

HT—see mustard agent.

Immediate Response Zone (IRZ)—the emergency planning zone immediately surrounding each Army installation. Generally it extends to about 6 miles from the installation's chemical storage area.

Incident Command System (ICS)—a standardized on-scene emergency management construct specifically designed to provide for the adoption of an integrated organizational structure that reflects the complexity and demands of single or multiple incidents, without being hindered by jurisdictional boundaries. ICS is the combination of facilities, equipment, personnel, procedures, and communications operating with a common organizational structure, designed to aid in the management of resources during incidents (NRP).

Ingestion Exposure—contact with the mouth, throat, and gastrointestinal tract by means of food or water consumption, or use of tobacco products (e.g., cigarettes or chewing tobacco).

Initial Response Force (IRF)—an emergency action organization tasked to provide first response to a chemical event at an installation assigned a chemical surety mission. Under command of the Installation Commander, the IRF is comprised of command and control elements and emergency teams capable of providing emergency medical services and initiating those actions necessary to prevent, minimize, or mitigate hazards to public health and safety or to the environment.

Institutional Populations—people in schools, hospitals, nursing homes, prisons or other facilities that require special care or consideration by virtue of their dependency on others for appropriate protection.

Joint Information Center (JIC)—the physical location where public affairs staff meet to provide accurate, timely, and coordinated emergency information to the public and the news media. A JIC gathers, produces, and disseminates emergency information using all available means, and includes representatives of each jurisdiction, agency, private-sector, and non-governmental organization involved in incident management activities.

Joint Information System (JIS)—a unified, coordinated public information system/network with common resources and agreed-upon procedures that links participants through technological means when geographical restrictions, incident management requirements, and other limitations preclude physical attendance at a central location. The JIS allows public affairs staff to communicate effectively and make joint announcements as if located in the same facility.

Lewisite—an organic arsenical blister agent; a brown or colorless liquid that is part of the unitary chemical stockpile of vesicants.

Limited Area (military term)—the area immediately surrounding one or more exclusion areas. Normally, the area between the boundaries of the exclusion areas and the perimeter boundary.

Liquid Agent—any chemical agent in undiluted form; includes droplets and aerosols. Only VX or the vesicant agents (e.g., H, HD, and HT) are likely to be encountered in liquid form.

Local Emergency Planning Committee (LEPC)—the planning body designated by Superfund Amendments and Reauthorization Act (SARA), Title III legislation as the planning body for preparing local hazardous materials plans.

Local Government—a county, municipality, city, town, township, local public authority, intrastate district, council of governments, regional or interstate government entity, or agency or instrumentality of a local government; an Indian tribe or authorized tribal organization; a rural community, unincorporated town or village, or other public entity (NRP).

Major Disaster—as defined by the Stafford Act, any natural catastrophe or, regardless of cause, any fire, flood, or explosion, in any part of the United States, which in the determination of the President causes damage of sufficient severity and magnitude to warrant major disaster assistance under this act to supplement the efforts and available resources of states, local governments, and disaster relief organizations in alleviating the damage, loss, or suffering caused thereby (NRP).

Mass Care Center—a facility for providing emergency lodging and care for people made temporarily homeless by an emergency. Essential basic services (e.g., feeding and family reunification) are provided.

Mass Casualty Incident—an incident which generates more patients than available resources can manage using routine procedures and that will require assistance from outside agencies.

Maximum credible event (MCE)—military term for the worst single event likely to occur from the release of chemical agent as a result of an unintended, unplanned, or accidental event. It has a reasonable probability of happening.

Memorandum of Understanding (MOU)—the written agreement (August 1997) whereby the Army and DHS have agreed to collaborate on the emergency preparedness aspects of the Chemical Stockpile Disposal Program.

Mitigation—activities designed to reduce or eliminate risks to persons or property or to lessen the actual or potential effects or consequences of an incident. Mitigation measures may be implemented prior to, during, or after an incident (NRP).

Monitoring Teams—groups of trained individuals in appropriate protective clothing who could travel through agent-contaminated areas to measure agent concentrations in or on various environmental media and collect samples for later analysis.

Mustard Agent—the vesicant agents (H, HD, and HT) that cause blistering. In sufficient amounts they can be fatal if inhaled or if not quickly removed from exposed skin.

Mutual Aid Agreement—written agreement between agencies, organizations, and/or jurisdictions that they will assist one another on request by furnishing personnel, equipment, and/or expertise in a specified manner (NRP).

National Contingency Plan (NCP)—“The National Oil and Hazardous Substances Pollution Contingency Plan” (40 CFR Part 300), this is the Federal government’s blueprint for responding to both oil spills and hazardous substance releases. This plan develops a national response capability and promotes overall coordination among the hierarchy of responders and contingency plans (EPA).

National Defense Area (NDA) (military term)—an area established on nonfederal lands located within the United States, its possessions, or territories for the purpose of safeguarding classified defense information or protecting Department of Defense equipment or material.

National Response Center—a communications center for activities related to hazardous materials response actions, located at Coast Guard headquarters in Washington, DC. The center receives and relays notices of discharges or releases to the appropriate on-scene coordinator; disseminates on-scene coordinator and Regional Response Team; reports to the National Response Team when appropriate; and provides facilities for the National Response Team to use in coordinating a national response action when required.

National Response Plan (NRP)—a plan that provides the structure and mechanisms for national-level policy and operational coordination of Federal structures, capabilities, and resources into a unified, all-discipline, and all-hazards approach to domestic incident management (NRP).

National Response Team (NRT)—the group consisting of representatives of 14 government agencies (Department of Defense, Department of Interior, Department of Transportation/Research and Special Programs Administration, Department of Transportation/U.S. Coast Guard, Environmental Protection Agency, Department of Commerce, Federal Emergency Management Agency, Department of State, Department of Agriculture, Department of Justice, Department of Health and Human Services, Department of Labor, Nuclear Regulatory Commission, and Department of Energy) that implements the National Contingency Plan.

Nerve Agent—the nerve agents (GA, GB, and VX) are lethal colorless, odorless, and tasteless agents that can be fatal upon skin contact or when inhaled. These agents attack the central nervous system by inhibiting the production of acetyl cholinesterase, which is essential for proper operation of the nervous system.

Normal Shelter-in-Place—a protective action that involves taking cover in a building, closing all doors and windows, and turning off ventilation systems. Effectiveness is improved by going into an interior room. The shelter should be opened up or abandoned after the toxic plume has passed.

Off-post—the area surrounding a military installation or facility.

On-post—a military installation or facility.

On-scene Coordinator (OSC)—the Federal official predesignated by the Environmental Protection Agency or the Coast Guard to coordinate and direct Federal responses under subpart D of the National Contingency Plan, or the official designated by the lead agency to coordinate and direct removal actions under subpart E of the National Contingency Plan. The Department of Defense and Department of Energy are included as OSC under subpart E.

On-site—an area around the scene of a chemical event under the operational control of the On-site Commander, technical escort officer, or the IRF or SRF Commander. Includes any area established as a National Defense Area (DA PAM 50-6).

Pre-hospital Environments—term used in medical preparedness guidelines to indicate all emergency response areas that are outside both the Army installation boundaries and the hospital grounds.

Pressurized Shelter-in-Place—a protective action that is similar to enhanced shelter-in-place except that the infiltration of contaminated air is effectively prevented by drawing outside air into the shelter through a filter that removes chemical agent. This filtered air creates a positive pressure in the shelter so that clean air is leaking out instead of contaminated air leaking in.

Primary Receiving Hospitals—hospital that is designated by State or local disaster plans to provide initial medical care to the civilian population in the event of a chemical warfare release.

Protective Action—an action or measure taken to avoid or reduce exposure to a hazard.

Protective Action Decision (PAD)—those decisions by State and local officials on what protective action instructions to recommend to the public in the event of a release of chemical agent, based upon hazard information, specific emergency planning zones, recommendations from the Installation Commander, and other information.

Protective Action Recommendation (PAR)—those initial and subsequent recommendations by the Installation Commander to off-post community officials in response to a chemical accident/incident. These recommendations may include evacuation, shelter-in-place, and exit shelter-in-place.

Protective Action Zone (PAZ)—the second planning zone beyond the immediate response zone. Generally it extends to about 18 to 35 miles from the installation's chemical storage area, and at some installations it extends further.

Public Alert and Notification System—the system for obtaining the attention of the public and providing appropriate emergency information. Sirens are the most commonly used public alert devices but frequently are supplemented by tone alert radios, visual warning devices for the hearing impaired, and telephone-based alert/notification systems.

Public Affairs Officer (PAO)—the Army installation person responsible for public affairs. The PAO is the installation counterpart to the off-post Public Information Officer.

Public Information Officer (PIO)—the person on the emergency management team who is in charge of public information affairs. The PIO is the counterpart to the on-post Public Affairs Officer.

Quarantine—a state of enforced isolation or restraint designed to prevent the spread of contamination, disease, or pests. Activities of persons, transport of goods or animals, and access to affected or suspect properties may all be restricted.

Reception—refers to a process in which evacuees receive a very quick evaluation for medical needs, are referred for further medical care if needed, and are offered further information and assistance such as registration, decontamination, and mass care.

Reception Center—refers to a location where reception functions are performed.

Release—Any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discarding of barrels, containers, and other closed receptacles containing any hazardous substance or pollutant or contaminant). For purposes of the NCP, release also means threat of release. There are exclusions to this definition (see NCP).

Recovery—the development, coordination, and execution of service- and site-restoration plans for impacted communities and the reconstitution of government operations and services through individual, private sector, nongovernmental, and public assistance programs (NRP).

Re-entry—the entry of persons into an affected area following a hazardous materials incident. Re-entry can be restricted (entry of monitoring crews) or unrestricted (unlimited public access) (EPA).

Re-entry Interval—defined by the Environmental Protection Agency as “the period of time immediately following the application of a pesticide to a field when unprotected workers should not enter” (40 CFR 170.2). These intervals are the estimated periods of time necessary for an individual formulation to degrade or dissipate to the re-entry level. That is to say, the concentration of surface residue (in mg or ng/m²) that would produce no toxic response in exposed individuals. This concept is pertinent to CSEPP re-entry/restoration decision-making.

Regional Response Team (RRT)—the representatives of Federal agencies and a representative from each state in the Federal region. During a response to a major hazardous materials incident involving transportation or a fixed facility, the on-scene coordinator may request that the RRT be convened to provide advice or recommendations in specific issues requiring resolution.

Relocation Points—areas to which a population or community can be temporarily or permanently removed in response to an emergency or disaster. Relocation is distinguished from evacuation in that during an emergency, the potential for a release exists; in contrast, during the relocation phase, there is no passing plume.

Response—activities that address the short-term, direct effects of an incident. Response includes immediate actions to save lives, protect property, and meet basic human needs. Response also includes execution of EOPs and of incident mitigation activities designed to limit the loss of life, personal injury, property damage, and other unfavorable outcomes (NRP).

Restoration—encompasses the efforts and resources needed to return the agent-affected area to a condition safe for public access and use.

Secondary Contamination—chemical agent contamination that occurs due to contact with a contaminated person or object rather than to direct contact with liquid agent in the atmosphere; cross contamination.

Service Response Force (SRF) (military term)—a DA-level emergency response organization, commanded by a general officer, capable of performing and sustaining the chemical accident/incident response and assistance mission. The SRF is comprised of the Initial Response Force and follow-on forces consisting of a staff and specialized teams from various agencies and organizations involved in the response to and recovery from a chemical event.

Shelter-in-place—a protective action that involves taking cover in a building and taking steps to limit natural ventilation in order to reduce exposure to a hazard. Different categories include normal, expedient, enhanced, or pressurized shelters.

Signs—objective, physical evidence of a medical condition or disease (e.g., drooling); readily measured or observed.

Site-Specific Emergency Response Concept Plan—a concept plan developed for a specific chemical agent stockpile location by applying the concepts and methodologies of the Emergency Response Concept Plan. Each site-specific concept plan categorizes the chemical events that could occur at that location and examines the topographic, meteorological, and population characteristics of the area to develop proposed emergency planning zone boundaries and identify appropriate protective actions.

Special Facilities—locations with concentrations of special-needs individuals that have responsibility for providing assistance to those individuals. Examples include schools, daycare centers (for children or adults), nursing homes, and hospitals.

Special-needs Individuals—persons who require assistance or special equipment in order to receive notification of an emergency and/or to take action to protect themselves. Examples include persons with perceptual, physical, or mental disabilities.

Special Populations—those individuals or groups that may be institutionalized or have needs that require special consideration in emergencies.

Stafford Act—the Robert T. Stafford Disaster Relief and Emergency Assistance Act (PL 100 - 707 of Nov. 23, 1988; see 42 USCS 121); defines qualifications that must be met for Federal declaration of a “disaster,” and provision of Federal disaster relief.

State Emergency Response Commission (SERC)—the state planning group designated by SARA, Title III legislation as the state coordinating body for hazardous materials activities.

State—any state of the United States, the District of Columbia, the Commonwealth of Puerto Rico, the U.S. Virgin Islands, Guam, American Samoa, the Commonwealth of the Northern Mariana Islands, and any possession of the United States (NRP).

Superfund Amendments and Reauthorization Act of 1986 (SARA)—public law that amended CERCLA. Title III of SARA includes detailed provisions for community emergency planning for fixed chemical facilities.

Surety—see chemical surety.

Symptoms—subjective evidence of a medical condition, physical disturbance, or disease (e.g., headache); usually need to be communicated by patient, and are not readily measured or observed.

Tertiary-receiving Hospital—a hospital that receives referrals from primary receiving hospitals. Additional services such as burn care, psychiatric service, and toxicologic consultation are available at the tertiary level of care.

Title III—the “Emergency Planning and Community Right-to-Know Act of 1986.” A law that requires the establishment of State and local planning structures (SERCs and LEPCs) for emergency planning for hazardous materials incidents. It requires (1) location site-specific planning around extremely hazardous substances, (2) participation in the planning process by facilities storing or using hazardous substances, and (3) notifications to SERCs and LEPCs of releases of certain hazardous substances. It also provides for mechanisms to provide information on hazardous chemicals to the public.

Traffic Control Point (TCP)—a location that is staffed to ensure the continued movement of traffic inside or outside an area of risk. Traffic control is a temporary function to be implemented at points where normal traffic controls are inadequate or where redirection of traffic becomes necessary due to emergency conditions.

Tribe—any Indian tribe, band, nation, or other organized group or community, that is recognized as eligible for the special programs and services provided by the United States to Indians because of their status as Indians (NRP).

Unitary Chemical Munitions—munitions designed to contain a single-component chemical agent for release on a target.

Vesicant Agent—a chemical agent such as sulfur mustard (HD) or Lewisite (L) that induces blistering and tissue damage.

Virtual Joint Information Center—the off-site public affairs resources that support a standing JIC operation. Virtual JIC staff work from remote locations and use technological means to provide a range of assistance that helps the primary JIC meet its information gathering, production and dissemination functional responsibilities.

Volunteer—any individual accepted to perform services by an agency that has authority to accept volunteer services when the individual performs services without promise, expectation, or receipt of compensation for services performed (NRP).

VX—see nerve agent.

Weathering—degradation through the combined actions of sunlight, temperature, moisture, aeration, and microbial activity. As a decontamination procedure for chemical warfare agents, NATO recommends weathering for lawns, gardens, pastures, woods, and other similar areas for contaminated areas not in immediate proximity to occupied buildings. It is simple, and requires few personnel and no special equipment to operate; it is neither precise nor fast and is largely temperature dependent.

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