

Chemical Stockpile Emergency Preparedness Program

Fiscal Year 2013 Report to Congress April 21, 2014



Federal Emergency Management Agency

April 21, 2014

Message from the Administrator



I am pleased to present the Chemical Stockpile Emergency Preparedness Program (CSEPP) Fiscal Year (FY) 2013 Report to Congress, which has been prepared by the Federal Emergency Management Agency.

This document has been compiled in response to requirements set forth in 50 U.S.C. §1521 (e)(2)(C), which directs that "Not later than December 15 of each year, the Administrator shall transmit a report to Congress on the activities carried out under this paragraph during the fiscal year preceding the fiscal year in which the report is submitted" and 50 U.S.C. §1521 (i)(2)(B), which requires that the report contain "[a] siteby-site description of actions taken to assist State and local governments (either directly or through the Federal

Emergency Management Agency) in carrying out functions relating to emergency preparedness and response in accordance with subsection (e) of this section."

Pursuant to Congressional requirements, this report is being provided to the following Members of Congress:

The Honorable Howard P. "Buck" McKeon Chairman, House Committee on Armed Services

The Honorable Adam Smith Ranking Member, House Committee on Armed Services

The Honorable Carl Levin Chairman, Senate Committee on Armed Services

The Honorable James Inhofe Ranking Member, Senate Committee on Armed Services The Honorable Rodney Frelinghuysen Chairman, House Appropriations Subcommittee on Defense

The Honorable Richard Durbin Chairman, Senate Appropriations Subcommittee on Defense

The Honorable Thad Cochran Ranking Member, Senate Appropriations Subcommittee on Defense

The Honorable Pete Visclosky Ranking Member, House Appropriations Subcommittee on Defense

Inquiries relating to this report may be directed to me at (202) 646-3900 or to the Department's Chief Financial Officer, Peggy Sherry, at (202) 447-5751.

Sincerely,

W. Craig Fugate Administrator Federal Emergency Management Agency

Executive Summary

The Chemical Stockpile Emergency Preparedness Program (CSEPP) is a Whole Community partnership that unites the Federal Emergency Management Agency (FEMA), the U.S. Army, multiple Federal departments and agencies, two States, dozens of local governments, volunteer organizations, and private industry. Its mission is to "enhance existing local, installation, tribal, State, and Federal capabilities to protect the health and safety of the public, workforce, and environment from the effects of a chemical accident or incident involving the Department of the Army (DA) chemical stockpile." In Fiscal Year (FY) 2013, CSEPP continued to fulfill that mission.

Although the Army continues to construct disposal facilities and test systems that will destroy chemical weapon stockpiles at the final two CSEPP sites— Pueblo, Colorado, and Blue Grass, Kentucky—the risks to the communities surrounding them remain. FEMA is committed to maintaining its preparedness mission until the chemical stockpile is destroyed.

CSEPP has completed its mission at six of the original eight sites, and program funding has left these communities better prepared to respond to any hazard or emergency. During FY 2013, preparedness goals in Pueblo and Blue Grass were met through collaborative program management, including integrated process teams that brought together all stakeholders to identify program needs, develop alternatives, and implement solutions.

Specific CSEPP accomplishments in Colorado and Kentucky during the fiscal year include:

- Planned, designed, and constructed eight emergency operations centers
- Maintained interoperable emergency communications systems
- Conducted full-scale emergency exercises (jointly managed by the Army and FEMA) and finalized after-action reports with corrective action plans
- Educated at-risk residents on emergency protective actions and trained emergency management and response personnel

These activities exemplify FEMA's mission "to support our citizens and first responders to ensure that as a Nation we work together to build, sustain, and improve our capability to prepare for, protect against, respond to, recover from, and mitigate all hazards."

This report also includes an overview of the status of the program, a summary of significant program accomplishments at the federal level, and a description of the status and accomplishments of the two CSEPP communities.



CSEPP Fiscal Year 2013 Report to Congress

Table of Contents

I.	Legislative Requirements	1
II.	Background	2
III.	Program History	3
	Collaboration Funding Administration The CSEPP Environment	4
IV.	Results	10
	CSEPP Management System Risk Reduction CSEPP Benchmarks	10
V.	Summary of Significant Activities	14
	Administration	16 17 17 18 18 18 19 20 20 20 21 21 22
VI.	Conclusion	24

Appendix A: Pueblo, Colorado	25
Fiscal Year 2013 Accomplishments	25
Appendix B: Blue Grass, Kentucky	32
Fiscal Year 2013 Accomplishments	33
Appendix C: CSEPP Stakeholders	39
State of Colorado Commonwealth of Kentucky	
Appendix D: Acronyms	40

I. Legislative Requirements

The U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) submits the Fiscal Year (FY) 2013 Annual Report to the U.S. Congress in accordance with the requirements set forth in 50 U.S.C. §1521 (e)(2)(C), which directs the following:

"Not later than December 15 of each year, the Administrator shall transmit a report to Congress on the activities carried out under this paragraph during the fiscal year preceding the fiscal year in which the report is submitted."

In addition, 50 U.S.C. §1521 (i)(2)(B) requires that the report contain:

"[a] site-by-site description of actions taken to assist State and local governments (either directly or through the Federal Emergency Management Agency) in carrying out functions relating to emergency preparedness and response in accordance with subsection (e) of this section."

Pursuant to subsection (e), the Department of the Army (DA) and FEMA entered into a memorandum of understanding (MOU) whereby the Army provides funds to FEMA to support the Chemical Stockpile Emergency Preparedness Program (CSEPP) mission of assisting State and local governments to carry out functions related to off-post emergency preparedness and response in communities surrounding military installations that store and dispose of lethal chemical warfare agents and munitions. The Army retained responsibility for all related on-post activities.

This report reflects the status of FEMA activities implemented by CSEPP to provide maximum protection for residents in the two States and 11 counties that participated in CSEPP in FY 2013.

II. Background

CSEPP is a unique Whole Community partnership whose participants share a common goal: to prepare and enable communities to protect residents in the unlikely event of a chemical emergency at one of the Nation's chemical stockpile sites. CSEPP's vision is "a fully prepared team of local, installation, tribal nation, State, and Federal professionals, developing and executing an effective emergency preparedness and response program." To fulfill this vision, CSEPP's mission is "to enhance existing local, installation, tribal, State, and Federal capabilities to protect the health and safety of the public, workforce, and environment from the effects of a chemical accident or incident involving the DA chemical stockpile."

Figure 1 illustrates chemical stockpile locations that remain operational and those for which destruction of the stockpile has been completed.

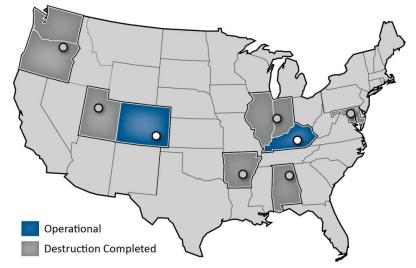


Figure 1: Current and Previous Chemical Stockpile Locations

In FY 2013, CSEPP focused on the remaining stockpiles at Pueblo Chemical Depot in Colorado and Blue Grass Chemical Activity at Blue Grass Army Depot in Kentucky. CSEPP activities in Pueblo are detailed in Appendix A and activities in Blue Grass are detailed in Appendix B.

In FY 2013, the States of Colorado and Kentucky and 11 counties surrounding the stockpile locations participated in CSEPP. Three of these counties are in immediate response zones (IRZs), the areas closest to where chemical warfare agents are stored, generally within an approximate 6-mile radius. Six counties are in protective action zones (PAZs), beginning at the outer edge of the IRZs and extending to a distance of between 6 and 31 miles. The remaining two counties are designated as host counties; they are not at direct risk from a chemical stockpile accident but instead provide decontamination and medical treatment, mass care, host facilities, and mutual aid support to at-risk jurisdictions. Specific active program partners are listed in Appendix C.

III. Program History

FEMA began providing preparedness assistance to communities near chemical stockpile sites in August 1988 through a MOU with the Army. Under this agreement, the Army provides for protection of personnel at its chemical depots (on-post) and provides funding to FEMA to assist State and local governments to carry out functions related to emergency preparedness and response in the communities surrounding depots (off-post). This enhanced the abilities of the civilian communities neighboring the eight original CSEPP sites to respond to potential chemical warfare agent emergencies. The MOU also established a framework for partnering with potentially affected State, local, and tribal governments to provide for

CSEPP Fiscal Year 2013 Stakeholders

- U.S. Army installations
- The State of Colorado
- The Commonwealth of Kentucky
- One county in Colorado
- Ten counties in Kentucky
- Residents of and businesses in CSEPP communities
- Federal facilities in the hazard zone
- U.S. Congress
- U.S. taxpayers
- Nonprofit and nongovernmental organizations
- Public- and private-sector agencies

public health and safety; identify roles and responsibilities; and establish joint program efforts in planning, training, exercising, and exchanging information. The MOU has been reaffirmed and revised over the years as the program matured; a 1997 revision (reaffirmed in 2004) gave FEMA responsibility and accountability for all aspects of off-post emergency preparedness.

CSEPP also operates under a strategic plan that reflects a coordinated effort between the Army's Chemical Materials Activity and FEMA's Technological Hazards Division to develop and implement a customer-centered planning process. The plan contains a comprehensive mission statement, goals and objectives, performance goals, descriptions, identification of key external factors that could affect achievement of the plan's goals and objectives, and an evaluation program.

Collaboration

Working in a collaborative environment with State and local partners, FEMA is responsible for the following tasks:

- Assisting States and counties to identify program needs and develop long-term budget goals and objectives
- Administering off-post CSEPP funds
- Supporting CSEPP States to develop response plans
- Developing, delivering, and evaluating training
- Providing technical assistance
- Developing programs for evaluating off-post readiness

Funding Administration

FEMA is engaged with State and local partners throughout the budget and funding administration cycle, beginning with assisting in assessment of program needs, developing and validating budgets, administering program funds, and finally closing out a site once the chemical destruction mission is completed.

CSEPP is administered through the States. FEMA validates off-post preparedness requirements and develops a budget in coordination with State, local, and tribal governments. These budget requests are then incorporated into the U.S. Department of Defense (DoD) budget submission to Congress. Once appropriated, the Army transfers the funds to FEMA, which has full authority and responsibility for their distribution and expenditure. Both FEMA and the Army continue to cooperate closely and coordinate their efforts. Program management performance is maintained through regular joint meetings; common budgeting, cost accounting, and performance management systems; and aggressive program integration efforts (see Figure 2).

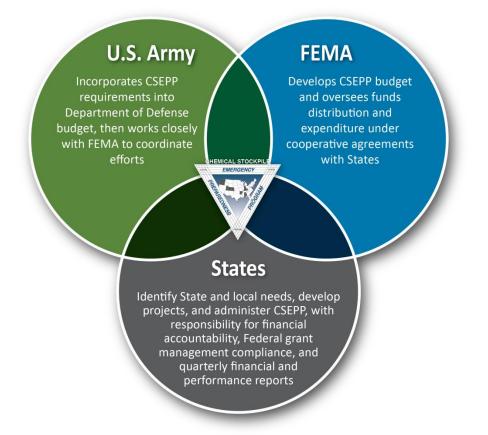


Figure 2: CSEPP Program Integration

FEMA distributes funds to the States under CSEPP cooperative agreements (CAs) that include an annual work plan negotiated between each State and its FEMA Regional office. Under these CAs, each State identifies its needs, develops proposed projects to meet those needs, requests funds from FEMA, and disburses these funds to the various State offices and local governments (who act as sub-grantees to the State) involved in the proposed projects. The States are responsible for financial accountability, adherence to Federal grant management rules, and providing quarterly financial reports and narrative performance reports addressing the capability improvement realized through the funds.

From CSEPP's inception in 1988 through the end of FY 2013, approximately \$1.3 billion has been allocated to States and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) under annual CAs or through FEMA-managed contracts. Allocation of resources is tracked according to the CSEPP organization (including the Army and FEMA) that spends the funds rather than the jurisdiction that benefits from the service. Therefore, the amount of funds spent at the State level does not include Federal expenditures on contract support to the communities (such as for engineering and training services) and thus does not necessarily reflect the complete picture of benefits that communities have received through CSEPP.

Total funding amounts in Table 1 represent combined totals for direct award funds and funding for contracts managed by FEMA Headquarters on behalf of CSEPP States and the CTUIR. Direct award funds represent amounts sent directly to States and the CTUIR via FEMA CAs; one Army CA was sent directly to the CTUIR in FY 2002. FEMA-managed contracts include contracts managed by FEMA on behalf of States or amounts FEMA awarded to the U.S. Army Corps of Engineers for collective protection projects in the communities. These funds represent a combination of actual expenditures and remaining funds to expend. The FY 2013 expenditures in Alabama reflect federal contracting for removal of collective protection equipment, not grant dollars. Alabama CSEPP was closed out in FY 2012.

Table 1: CSEPP Off-post Funds, Including Direct Awards and FEMA-managed Contracts

State	FY 2013	FY 1989–2012
Alabama	\$105,727	\$399,226,059
Arkansas	\$0	\$117,540,262
Colorado	\$9,902,604	\$75,214,581
Illinois	\$0	\$12,013,875
Indiana	\$0	\$56,215,924
Kentucky	\$20,550,222	\$208,465,428
Maryland	\$0	\$31,887,215
Oregon	\$0	\$161,203,626
Utah	\$0	\$123,761,112
Washington	\$0	\$77,141,705
CTUIR	\$0	\$6,606,173
Totals		\$1,269,275,960

The CSEPP Environment

CSEPP depends upon multiple programmatic, technological, collaborative, and societal factors that stakeholders must consider if the program is to meet its goals and operate effectively.

Programmatic Factors

Effective risk analysis and planning require strong and continuous commitment from States, communities, and tribal nations. To present and defend their annually updated lifecycle cost estimates (LCCEs), Federal, State, local, and tribal agencies developing CSEPP budgets must ensure funding requirements are valid and must maintain fully operational CSEPP efforts through the end of destruction operations at each stockpile site. Delays and extensions of the stockpile destruction mission will necessitate continued CSEPP operations and will increase the cost of the program beyond projections.

Technological Factors

Emergency preparedness and response capabilities must be maintained to achieve full operational readiness through the end of destruction operations. Continued research and ongoing development of new technologies in interoperable public safety communications systems, public alert and notification systems (including the Integrated Public Alert and Warning System [IPAWS]), and emergency management automation systems continue to produce new and expanded requirements for technology. Overall costs and benefits of replacing current technology with new systems, however, must be carefully weighed to ensure prudent stewardship of taxpayer funds. CSEPP conducts cost-benefit analyses for upgrades, replacements, and maintenance to ensure operational readiness and compliance with changing Federal requirements. When approved, CSEPP implements these changes in a regionalized, interoperable manner.

Collaborative Factors

The partnership between FEMA and the Army is supported with coordination with the Environmental Protection Agency, the Centers for Disease Control and Prevention (CDC), the Occupational Safety and Health Administration (OSHA), and other Federal agencies. This partnership and coordination enables government officials to collectively assess the needs of CSEPP communities and determine comprehensive guidance. This coordination is also crucial to resolving issues including:

- Determining appropriate permissible exposure limits (PELs) for workers or identifying other occupational exposure limits (such as National Institute for Occupational Safety and Health [NIOSH] recommended exposure limits [RELs] or American Conference of Governmental Industrial Hygienists [ACGIH] Threshold Limit Values® [TLVs]) when OSHA has not established a PEL;
- Establishing protocols for emergency workers;
- Providing health and safety standards for personal protective equipment; and
- Identifying appropriate published exposure limits or guidelines for off-post populations (such as Acute Exposure Guideline Levels).

Societal Factors

It is important to engage the Whole Community in preparing for, responding to, recovering from, and mitigating disasters. The Whole Community concept is a means by which residents, emergency management practitioners, organizational and community leaders, and government officials can collectively understand and assess the needs of their communities and determine the best ways to organize and strengthen their assets, capacities, and interests. Doing so builds a more effective path to societal security and resilience.

Throughout its history, CSEPP has strived to be inclusive of the Whole Community and support the diversity of organizations and populations in the communities the program serves. As part of the program's efforts to address and involve individuals with access and functional needs, the requirements under Title VI of the Civil Rights Act of 1964 and Executive Order 13166: *Improving Access to Services for Persons with Limited English Proficiency (LEP)* are specifically reflected in CSEPP's annual cooperative agreement guidance, as well as in its functional guidance on community planning and public affairs. The Colorado and Kentucky CSEPP communities include LEP populations, most notably Spanish-language speakers. The program provides technical assistance, grant funds, and training; specific examples of these efforts supporting the LEP community are given throughout this report. U.S. Census data and information contained in emergency planning studies estimate that the LEP community in the Pueblo CSEPP emergency planning zone (EPZ) is 438 individuals (4.67% of the nighttime

population) and the LEP community in the Blue Grass CSEPP EPZ is 1,446 individuals (1.39% of the nighttime population).

CSEPP also engages the Whole Community through the use of integrated process teams (IPTs) in each community. The use of IPTs, groups of CSEPP stakeholders who represent Federal, State, and local organizations, as a program management tool was authorized by Congress and implemented under the joint FEMA-Army memorandum. IPTs provide common solutions and consistency of approaches across CSEPP communities and produce products and tools of immediate value not only to CSEPP but also to the broader emergency preparedness field. Programmatic policy is developed with input from IPTs that include both Colorado and Kentucky CSEPP stakeholders. Outputs from these groups are forwarded to FEMA and Army CSEPP program management for consideration. Specific guidance documents have been developed by IPTs and approved by program leaders. Since the documents were developed by working groups of stakeholders, concurrence was achieved long before the guidance is approved and officially implemented. The Pueblo and Blue Grass CSEPP communities each have their own IPT, as well as sub-IPTs. In addition, there are national IPTs that correlate with specific CSEPP benchmarks (see Table 2 on the next page for a complete list of working groups).

Functional Working Groups	Community Working Groups
 Automation Exercise Coordination Group Medical Coordination Group Public Affairs 	 Pueblo Community Alert and Notification Work Group Automation Work Group Charter Committee Exercise Steering Group Exercise Planning Committee Medical Preparedness Work Group Public Affairs Work Group Readiness Work Group Training Work Group Blue Grass Community Medical Quality Improvement Team Integrated Public Alert and Warning System Working Group Public Affairs Work Group Exercise Planning Team

Table 2: Current CSEPP Working Groups

Whole Community Approach to Building Capacity

As a meteorologist for the National Weather Service in Pueblo, CO, Bill Fortune knew a thing or two about warning the public of impending danger. That professional experience made Mr. Fortune an ideal candidate for the Risk Communication Network organized by the local Public Information Officers and facilitated by the Pueblo County Sheriff's Office Emergency Services Bureau. In 2011, the community became aware of the need to recruit trained public information officers who could assist during emergencies. The Pueblo County CSEPP Public Information Officer reached out to the Whole Community in and around Pueblo County to build a cadre of trained individuals to help with disasters. Mr. Fortune and his colleagues from the National Weather Service Pueblo office signed up.

Members of the Risk Communication Network are recruited from public safety organizations, not-for-profit organizations, hospitals, the business community and state, county and federal agencies. Members are offered specific training by CSEPP to further develop their skills to serve as a public information officer. "I never turned down an opportunity for training," said Mr. Fortune. "I took the basic public information officer training, spokesperson course, technology courses and Joint Information Center training."

Mr. Fortune retired from the National Weather Service in 2009, but stayed on as volunteer in Pueblo County. The experience he gained working with the Pueblo County CSEPP gave him the confidence to also volunteer with the American Red Cross. "When I got to Red Cross, they recognized the experience and training I had through CSEPP and they made me a lead on several disaster assignments." said Mr. Fortune. "During my most recent 24 day deployment for the Colorado wild fires, I used my CSEPP training every day."

Mr. Fortune credits the CSEPP training programs with providing him the specific skills necessary to serve both the American Red Cross and the Pueblo CSEPP. Each year, highly qualified and experienced trainers deliver courses in the CSEPP communities that enable local volunteers to benefit from the training without incurring the expense or inconvenience of out-of-town travel. The local-delivered training has proven beneficial in building capacity within the ranks of the emergency management organizations who understand the value and necessity of using community volunteers.

Today, the Pueblo County Sheriff's Office Emergency Services Bureau has a cadre of highly trained volunteers who are ready to assist during disasters. In addition to participating in CSEPP training and annual exercises, Risk Communication Network members have deployed to assist with other emergencies, both in their community and in neighboring counties. The value of recruiting volunteers from the Whole Community benefits Pueblo County, the State of Colorado and is a model for the country.

IV. Results

CSEPP Management System

CSEPP focuses on providing resources necessary to establish preparedness and response infrastructures that enables State and local emergency managers to warn the public quickly; manage the response; and communicate with emergency responders, the public, and the media. A key CSEPP management principle focuses on the concept of "functional equivalency," whereby resources are provided to each site to develop capabilities under the 12 programmatic benchmarks (discussed below) defined by CSEPP.

FEMA has a fiduciary responsibility to carefully evaluate and validate requests from States and communities for delivering necessary resources to local communities facing the most significant potential threats. FEMA strives to ensure cost-efficiency in procurement and interoperability among major systems that benefit multiple jurisdictions, which, in many cases, means procurement at the State level of alert and notification, communications, and automation systems. FEMA also maintains effective program management at the Federal level to ensure consistent capabilities throughout all CSEPP jurisdictions.

Risk Reduction

The most effective way to permanently reduce the risk to communities surrounding chemical stockpile sites is to destroy the agents posing the threat. As of the end of FY 2013, stockpiles have been completely destroyed at six sites: the Edgewood Area of Aberdeen Proving Ground (Maryland), Newport Chemical Depot (Indiana/Illinois), Pine Bluff Arsenal (Arkansas), Anniston Army Depot (Alabama), Umatilla Chemical Depot (Oregon/Washington/CTUIR), and Deseret Chemical Depot (Utah). At the two remaining stockpile locations, Pueblo and Blue Grass, additional risk reduction during storage has been achieved by taking steps to further secure the stockpile, including reconfiguring the stockpile, completing mitigation activities to reduce potential consequences of lightning strikes and earthquakes, enhancing agent detection and monitoring systems, and installing filtration systems at all Pueblo storage igloos.

CSEPP Benchmarks

The CSEP Program Guidance (December 2012) describes 12 performance benchmarks "used by Federal, State, and local government organizations to identify the CSEPP capabilities being funded... [and] in reporting the status of CSEPP to Congress in required annual reports." Under the CSEPP Cooperative Agreement, States are required to report expenditures and performance using these benchmarks. The twelve benchmarks are as follows:

Administrative support for participating jurisdictions

- Functioning alert and notification systems for the installations and IRZ
- Functioning automation systems connecting critical on-post and off-post emergency operations facilities
- Functioning communications system for the IRZ and installation and among emergency operations centers (EOCs), military installations, joint information centers, and State agencies
- Coordinated and regularly updated plans conforming to CSEPP guidance
- Functioning emergency operation centers for each installation and IRZ county
- Exercise programs consistent with the CSEPP Exercise Policy and Guidance
- Medical program for off-post response to a CSEPP incident/accident
- Personnel (e.g., coordinators, public information/public affairs officers, planners, and information technology specialists) to support CSEPP activities
- Protective action strategies consistent with guidance for each jurisdiction
- Public outreach and education programs for workers and the general public
- Training programs consistent with FEMA State training plans and the Army certification requirements that maintain proficiency of emergency service providers, responders, and staff, according to guidance

These benchmarks apply to the States and counties and are reflected in CSEPP's strategic plan, CSEPP guidance, LCCEs, annual budgets, quarterly performance reports from grantees, and employee work plans.

To complement the benchmarks, CSEPP developed a performance measurement system that includes several elements:

- FEMA leads each Community IPT in a bi-annual update of a community profile describing the status of each community benchmark both quantitatively (e.g., how many sirens and message reader boards installed) and qualitatively (e.g., are the resources sufficient to support a capability). The profile enables Federal, State, and local partners to assess the CSEPP community's deficiencies in preparedness, rate benchmark effectiveness, and address challenges through remedial action.
- FEMA and the Army jointly direct an annual community exercise (including a review of plans and training) in accordance with HSEEP. The exercise co-directors finalize an after-action report within 90 days that includes observations, findings, and a corrective action plan.
- FEMA reviews the results of community public information surveys to evaluate awareness of the local chemical stockpile hazard and the appropriate protective actions for the public.

• FEMA considers the results of jurisdictional equipment maintenance and testing programs as well as lessons learned from all-hazards community disaster response.

Figure 3 shows performance measure ratings for the Pueblo and Blue Grass CSEPP communities for each benchmark.

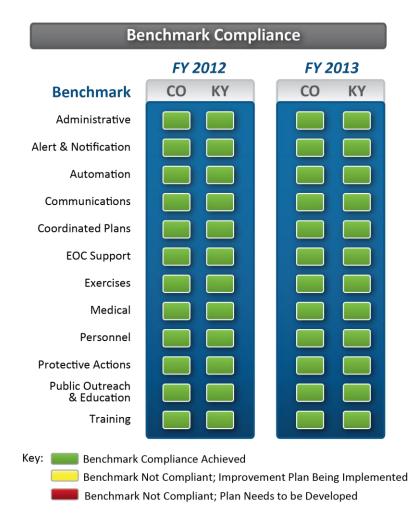


Figure 3: Benchmark Compliance for Pueblo, Colorado, and Blue Grass, Kentucky

As the program has continued and basic capabilities have been met, community expectations have increased. Within a given benchmark, a community may decide to focus on a specific challenge as a way to gauge performance on that benchmark. This does not mean that capabilities for that benchmark are incomplete, but it does illustrate where the community's priorities now lie. For example, a community may determine that its Coordinated Plans capability is less than complete because its recovery plan needs to be updated to reflect demographic changes. This specific issue would need to be resolved to return to full compliance.

A summary of significant activities in the next section discusses each benchmark from a programmatic level. The progress and status of each CSEPP community during FY 2013 are addressed in Appendix A (Pueblo) and Appendix B (Blue Grass).

V. Summary of Significant Activities

Programmatic activities in FY 2013 that support the 12 CSEPP benchmarks are as follows.

Administration



CSEPP's size and complexity necessitates a measured, cooperative, and inclusive administration to ensure success. These administrative activities include:

- Maintaining the programmatic LCCE for off-post CSEPP
- Monitoring and assessing program accomplishments using CSEPP's benchmarks
- Participating in bi-monthly community IPT meetings to assist all stakeholders in identifying program needs and preparing budget requests
- Maintaining the programmatic LCCE for FEMA, Colorado, and Kentucky
- Cooperatively negotiating an FY 2013 budget with Colorado and Kentucky to maintain and enhance emergency preparedness based upon the chemical stockpile risks
- Providing staff and contractor support to programmatic and community IPTs and workgroups to address technical challenges as they arise
- Providing programmatic oversight in accordance with the Army-FEMA MOU

CSEPP WebCA

CSEPP WebCA is a web-based, enterprise-wide system for managing CSEPP cooperative agreements throughout the entire grant lifecycle, from application through closeout. System requirements were developed by a user group comprising Federal, State, and local personnel and continue to be refined in response to field experience. CSEPP's benchmarks are integrated into the grant application and reporting processes implemented in CSEPP WebCA.

CSEPP WebCA automates preparation and submission of CA applications and allows staff at FEMA Regions and Headquarters to review and comment on each application. After Headquarters electronically submits funding approvals to the FEMA Region, Regional grant staff prepare and process awarding and obligating documentation. CSEPP WebCA automates quarterly performance and financial reporting, as well as the request, review, and approval of post-award modifications to grants, including reallocations, performance extensions, requests for additional funds, and changes of scope. Finally, at the end of the performance period for each grant, the system is used to prepare closeout reports and make any final adjustments to bring the un-liquidated balance to zero.

As noted above, grantees at six sites have closed out their CSEPP awards. As part of the closeout process, grant managers use CSEPP WebCA's electronic filing cabinet to archive grant-related documents. While each FEMA Region office maintains an official grant file for each grantee, the electronic filing cabinet provides a quick and convenient means of accessing grant information. CSEPP WebCA will be maintained until all CSEPP sites are closed.

2013 CSEPP Annual Meeting

The CSEPP Annual Meeting was held June 18–19, 2013. Kentucky Emergency Management and the Lexington-Fayette Urban County Government acted as hosts, and approximately 200 people from CSEPP's Whole Community attended. This year's meeting had three goals: (1) training and professional development, particularly for local first responders and receivers; (2) situational awareness of programmatic changes; and (3) sharing best practices and relationship building. The wide spectrum of topics requested by Colorado and Kentucky participants included all-hazard Incident Management Teams (IMTs); hospital evacuations; and communications, media relations, and public affairs protocols. Some of the attendees received medical education units (MEUs) and continuing education units (CEUs). The two days featured 18 sessions, including an evening session for those unable to attend training during the day, a panel case study, and an interactive planning session.

In addition to the training, FEMA and Colorado and Kentucky emergency management officials were briefed on the status of the stockpile, the implementation of IPAWS within CSEPP, and the latest emergency management efforts in Colorado and Kentucky. The meeting also included a Program Management Team (PMT) meeting for representatives from those stakeholders who oversee CSEPP. Functional IPTs and working groups also met in a joint session, followed by four individual sessions on automation, public affairs, medical, and exercise issues. Based on the attendee evaluation reports, the annual meeting met its goals.

These meetings have provided an opportunity to conduct training on involvement of the Whole Community, including the LEP community. For example, during the 2011 CSEPP National Workshop, a program entitled *Understanding and Communicating with Diverse Groups, Cultures and Communities* outlined specific tools for federal, state, and local CSEPP partners to identify and work with LEP populations, including the Modern Language Association's digital language map and LEP.gov. A similar program was held during FY 2013 that provided additional guidance on how to build community partnerships with diverse communities.

Other Workshops and Meetings

Throughout the year, FEMA sponsored other meetings with program managers and IPTs, as well as budget negotiation meetings, training delivery, and sessions that brought subject-matter experts together to provide direct technical assistance in emergency communications,

administration, training, planning, and emergency public information and public outreach. Of particular note was the January PMT meeting of Army, FEMA, and Colorado and Kentucky CSEPP stakeholders. This oversight group meets twice a year to ensure the interests of the various jurisdictions are being addressed programmatically.

Alert and Notification



Providing timely warning to residents of a chemical accident is a critical emergency management function. CSEPP has long supported and maintained robust emergency alert and notification systems in each CSEPP community as its primary means of meeting the Congressional mandate of maximum protection for communities, chemical workers, and the environment. Alert and

notification occur in two distinct steps: attracting the attention of the public and providing information concerning appropriate protective actions.

CSEPP alert and notification consists of a network of outdoor (e.g., public address capable sirens and electronic digital signs) and indoor (e.g., tone alert radios [TARs]) alerting devices in residential dwellings and special facilities that serve populated areas of the IRZs. CSEPP also provides digital telephone, email, and SMS text messaging as part of its digital telephone notification system. These systems use a combination of subscriber telephone information and public registration to transmit messages. CSEPP-provided alert and notification systems also warn residents of other hazards, such as tornadoes. FEMA provides direct engineering support in the form of government personnel and contractor support to ensure the CSEPP alert and notification systems are properly designed and maintained.

Outreach to and notification and protection of individuals with access and functional needs has been a CSEPP priority for several years. Weather alert radios that are used in both CSEPP communities to warn residents of all-hazard emergencies, including chemical accidents, have both an audible tone and flashing lights that illuminate when activated. These features alert persons with both visual and hearing impairments to an emergency. In addition, a reverse 911 system is available for residents to receive both voice and text messaging in the event of an emergency. To enhance awareness, CSEPP worked with the FEMA Office of Disability Integration and Coordination in FY 2012 to produce and distribute a video for local and state planners on inclusive emergency preparedness. In addition, both CSEPP states have both Spanish-language translators and interpreters in their Joint Information Center (JIC) to assist in communicating emergency instructions to persons with limited English proficiency. Sign language interpretation is also available at the JIC in Kentucky. These capabilities are tested during annual exercises.

IPAWS, the Nation's next-generation infrastructure of alert and warning networks, expands on the traditional audio-only radio and television Emergency Alert System (EAS) and facilitates Federal, State, territorial, tribal, and local warning authorities alerting and warning their

communities of any hazard affecting public safety. The CSEPP Program recognized the value of this program to enhance the current alert and warning system and both Pueblo and Blue Grass CSEPP sites agreed to pilot test IPAWS. Governance, technology, and messaging teams (consisting of FEMA, States, and county representatives) met monthly in FY 2013 to pilot the incorporation of IPAWS into the CSEPP communities. The associated products and templates will be shared beyond the CSEPP footprint.

Automation



WebPuff™

WebPuffTM, a web-based system built around the DoD-accredited D2-PuffTM atmospheric dispersion model, enables automated sharing of essential information between Army and off-post emergency operation centers. During an emergency, WebPuffTM would be a key response coordination tool, as

demonstrated by the quarterly exercises conducted by the Army in each CSEPP community. It exports all unique CSEPP information in a format compliant with latest private-sector standards for information exchange, the common alerting protocol (CAP). This allows States and counties to use existing or planned CAP-compliant commercial all-hazards automation systems to manage the response to a CSEPP event, avoiding the need to train personnel on separate systems and the cost of maintaining a separate CSEPP automation system.

CSEPP Portal

The CSEPP Portal (www.cseppportal.net) is a web-based information-sharing and collaboration platform using Microsoft SharePoint software. Since 2003, the portal has provided access to a vast library of information, including presentations from stakeholder meetings, site event calendars, news articles, current and archived photos, and Federal guidance on program benchmarks. The portal also provides a platform for the CSEPP communities, IPTs, and working groups to collaborate remotely on preparedness projects. Visitors can find CSEPP-related social media links organized by community and an aggregated blog page bringing together multiple RSS feeds. The portal currently has more than 1,000 registered users from CSEPP partner organizations across the Whole Community. In FY 2013, the portal was moved to a new hosting environment with upgraded and improved hardware, software, security, and redundancy.

Communications



CSEPP funds interoperable communication systems that provide emergency managers and first responders with robust, state-of-the-art equipment to significantly enhance communications during emergencies. These systems link all of the critical state and local response organizations, including fire, police, EMS, hospital, and public works. FEMA provides engineering support to assist the communities maintain their interoperable communications.

Throughout the fiscal year, FEMA provided technical assistance to the Pueblo and Blue Grass CSEPP communities in planning for communication systems upgrades, maintenance programs or designs of new capabilities. Details on the specific site communications projects are located in Appendices A and B.

Coordinated Plans



CSEPP emergency plans are developed to capture the most effective protective action strategies and procedures for each CSEPP community. During FY 2013, CSEPP provided technical support for response and recovery planning initiatives for communities surrounding Pueblo and Blue Grass, including ongoing assessment of populations at risk from a potential stockpile incident.

CSEPP plans are regularly updated based upon the latest guidance on the National Incident Management System (NIMS) and the Incident Command System (ICS) and coordinated across the depot and off-post community. FEMA has provided technical support for specific planning projects at Pueblo and Blue Grass, including maintenance of a planning template software program and revisions to State and county plans. Details on these projects are provided in Appendices A and B.

Emergency Operation Centers



Emergency operation centers serve as central locations for emergency management. In these facilities, various response organizations come together to plan and implement emergency response. CSEPP, along with local and State funding, helps fund emergency operation centers, ensuring that communities have necessary facilities to manage an emergency response. FEMA provided extensive support to the Pueblo and Blue Grass communities during FY 2013 to

assist in design and engineering of eight new and upgraded emergency operation centers. In particular, FEMA provided engineering personnel to assist with plan reviews and contractor support from technology firms to help States and counties develop system specifications. FEMA Region IV and Region VIII CSEPP personnel provided project oversight and conducted environmental and historical preservation reviews to ensure compliance with the National Environmental Policy Act and other related Federal laws and executive orders. Details on those projects are located in Appendices A and B.

Exercises



A robust exercise program is critical in evaluating the planning, training, and operation of an emergency management program. Annual CSEPP exercises are planned and executed by the Army and FEMA, with joint management by Army and FEMA Regional co-directors. These exercises ensure that on-post and off-post responses to the exercise scenario are properly coordinated across all response partners.

During FY 2013, the full-scale CSEPP exercises in Pueblo on May 18, 2013, and Blue Grass on September 18, 2013, were evaluated by teams of Federal, State, and local personnel. Final Army-FEMA after-action reports containing corrective actions are distributed across the program within 90 days of the exercise. Over the last 20 years at the eight sites, reports have been prepared on more than 100 full-scale community exercises (and ten joint table-top exercises), examining both community-wide and jurisdiction-specific practices. In the past, this process has resulted in enhancements to depot-to-community emergency notification agreements, mass decontamination practices by fire departments and hospitals, and protocols for community joint information systems. Based on the corrective action plans included in the FY 2012 exercise reports, specific improvements were made at several community medical facilities in FY 2013 in the protocols for nerve agent antidote use and patient triage and management.

In addition to these annual full-scale exercises, CSEPP jurisdictions participated in the Army's quarterly chemical accident/incident response exercises. Throughout the year, county emergency managers also perform all-hazard or other hazard-specific tabletop and functional exercises. During FY 2013, FEMA worked with its stakeholders to update programmatic guidance for conducting exercises. Working collaboratively with CSEPP stakeholders, exercise guidance emphasizes the benefits of a jointly managed Army-FEMA exercise program and provides a specific roadmap for planning, executing, evaluation, and assessment of CSEPP exercises. The CSEPP Exercise Policy & Guidance was reissued in December 2012. The guidance maintains consistency with the Homeland Security Exercise and Evaluation Program (HSEEP). Since many HSEEP precepts were already incorporated into CSEPP, there has been no difficulty working with communities to adopt HSEEP methodologies. CSEPP encourages all CSEPP-funded personnel to complete HSEEP training.

CSEPP policy emphasizes using peer evaluators during exercises. This initiative encourages emergency managers and first responders from CSEPP sites to travel to other sites to assist in evaluation of the exercise; more than two dozen individuals took advantage of this opportunity during the two exercises in FY 2013. This approach broadens the knowledge level of evaluators and serves as a method of sharing best practices among program participants. In addition to the actual experiences obtained by the peer evaluators, specific training is offered by FEMA to further the knowledge bases of exercise evaluator personnel.

Medical Program



In FY 2013, CSEPP communities continued to maintain and enhance their capabilities to treat victims following a chemical agent release from an Army chemical storage facility. Pueblo and Blue Grass increased their medical readiness efforts as the start of Army demilitarization operations approaches. The Medical Working Group holds open monthly teleconferences to support medical planning, training, and exercising. Personnel from emergency medical

services, fire, hospitals, and public health sectors constitute the core members of the working group. In addition, FEMA Regional personnel, U.S. Army Chemical Materials Activity, U.S. Army Public Health Command, and CDC routinely participate. This collaborative group enables FEMA and the Army to keep in continual contact with and support the medical stakeholders in each community. The working group's accomplishments this fiscal year include:

- Support the two annual CSEPP exercises, as well as smaller-scale remedial exercises, to resolve agency, department, and hospital-specific issues
- Develop the training track for medical personnel at the 2013 Annual Meeting

Approximately 378 students from EMS and hospitals in Colorado and Kentucky attended the range of medical training sessions offered during FY 2013. An example of the collaborative working relationship among FEMA, the Army, and State and local partners is the new hospital evacuation course. Developed by the Army's Chemical Materials Activity and the U.S. Army Public Health Command, the new course was designed in six modules on various aspects of hospital evacuation. It can be delivered as one 8-hour course or broken into smaller sections to better suit local training needs. The course was first delivered at the 2013 CSEPP Annual Meeting and has been scheduled again for FY 2014.

Personnel



Federal, State, county, and local response capabilities must be maintained with a team of qualified professionals. Experienced people are essential to oversee preparedness planning, implement procedures, and coordinate response actions. CSEPP-funded personnel execute the program on a day-to-day basis, including working to ensure emergency responders are adequately trained and equipped to complete their missions. During the fiscal year, FEMA evaluated and

adjusted Federal employee staffing levels to ensure program needs are met. In addition, FEMA provided training to ensure personnel have the knowledge necessary to carry out their mission. Building capacity within the personnel ranks of the program continues to be a CSEPP priority.

Protective Actions



CSEPP policy is that off-post emergency responders should never enter the chemical threat area as identified by the hazard model. As an added precaution, CSEPP continues to provide personal protective equipment ensembles (e.g., chemical protective suits, powered air-purifying respirators, gloves, and boots) and the associated mandatory training, to response personnel, including those who, for example, manage traffic and access control points. Should there be a

shift in the hazard area due to weather conditions, this equipment can be used as an escape ensemble by these workers. To date, more than 5,000 protective equipment ensembles have been provided to protect CSEPP's emergency workers.

Sheltering-in-Place

To maximize effectiveness of available protective actions, CSEPP has conducted studies to determine the best way to protect residents during a chemical emergency. One such study examined the process for determining optimal timing to begin and end sheltering-in-place to maximize protection to sheltering populations. CSEPP uses the results of these studies to develop improved protective action decision-making tools that assist local emergency managers to determine protocols for entering and exiting shelter. Quantifying the effectiveness of these protective actions has placed emergency decision-making on a sound, scientific footing.

Residents have been provided shelter-in-place kits to enhance shelter rooms and decrease possible infiltration of chemical warfare agent vapor into their homes. Over the course of the program, CSEPP has distributed more than 100,000 shelter-in-place kits in CSEPP communities. In addition, CSEPP continues to distribute copies of its shelter-in-place videos to residences and businesses.

Over-pressurization of Special Facilities

Over-pressurization of special facilities or safe areas, combined with air filtration, is a highly effective method of protecting the public and is implemented where it demonstrably reduces risk. However, because this equipment is integrated into heating and ventilation systems, its removal during the program closeout phase and after the chemical stockpile has been destroyed posed special challenges—in schools and hospitals especially, which cannot simply shut down to allow removal of over-pressurization equipment. CSEPP maintains an Interagency Agreement with the U.S. Army Corps of Engineers to support annual system maintenance in Kentucky as well as closeout activities. Details on these projects are provided in Appendix B.

Public Outreach and Education



CSEPP public outreach and education is a critical function of a robust emergency management system. CSEPP funds public information officers (PIOs) at the State level in Colorado and Kentucky, and in the counties closest to the stockpiles. PIOs have two primary responsibilities: to conduct public outreach and education programs to ensure residents know what to do in the event of a chemical accident and to maintain an emergency public information capability to provide

instructions to residents during an emergency. CSEPP provided training throughout the fiscal year consisting of program-specific instruction delivered in CSEPP communities and the sessions held during the CSEPP Annual Meeting. PIOs also teach FEMA local-level public information courses in their communities.

The CSEPP Public Affairs Integrated Process Team (PA IPT) examines cross-cutting public affairs issues at the two CSEPP sites. The PA IPT is a source of ideas for each community to draw upon for best practices and lessons learned. During PA IPT meetings, PIOs provide case studies of actual emergencies and review detailed discussions on results of CSEPP exercises. During FY 2013, the PA IPT also used social media to post industry best practices and focus on ways to enhance emergency public information during disasters, based on experience during the Colorado wildfires and Hurricane Sandy.

CSEPP PIOs build stronger relationships with local stakeholders by engaging the Whole Community through presentations to schools and civic organizations and by participating in community fairs and other public events. During FY 2013, Colorado and Kentucky PIOs continued to work with persons with limited English proficiency, and the local organizations that represent them, to identify and provide preparedness information to the LEP community. Both sites make CSEPP outreach materials available in Spanish and English, and Spanish interpreters are available for outreach events and program meetings.

Measuring the effectiveness of CSEPP public outreach is also an important element of the program. Colorado and Kentucky use regular telephone surveys to measure residents' knowledge of emergency protective actions and assess priorities for future outreach activities. During the survey process, Spanish-speaking call takers are available to ensure equal access to the questions. Details on specific site efforts are located in Appendices A and B.

Training



During FY 2013, CSEPP classroom training was conducted at State and local levels for participants from the CSEPP communities, as well as other Federal, State, and local agencies involved in homeland security. CSEPP training is distributed to many other communities across the United States in hardcopy formats and through the CSEPP training website. Since 1999, the site has recorded nearly 4.5 million course downloads, including approximately 370,000 downloads in FY 2013.

A list of CSEPP classroom training courses (delivered centrally or onsite) follows:

- CSEPP Orientation
- CSEPP Chemical Awareness
- CSEPP Emergency Operation Center
- ACT FAST
- Use of Auto-injectors by Civilian Emergency Medical Personnel
- Response Phase Decontamination
- Personal Protective Equipment
- Physician/ Emergency Medical Training
- CSEPP Multi Hazard Medical Training (Train-the-Trainer)
- CSEPP JICSAW IV
- CSEPP Information Technology (Public Affairs and Medical)
- CSEPP Advanced Information Technology
- CSEPP Spokesperson Training
- CSEPP Photography in Social Media Formats
- CSEPP Photo/Video workshop

In FY 2013, CSEPP released a video on technological hazards that summarizes collective knowledge from CSEPP and its sister program, the Radiological Emergency Preparedness Program, about emergency response to both accidental and intentional hazards. This video and other training videos produced by CSEPP can be streamed live or downloaded.

CSEPP also sponsored first responder and first receiver training where CEUs or continuing MEUs were awarded to those who successfully completed the training. Other training efforts that also provide long-term and post-CSEPP benefits to the communities include FEMA's Master Exercise Practitioner Program (MEPP), HSEEP, public affairs, and medical training. CSEPP has sponsored two iterations of MEPP and will sponsor a third offering in FY 2014. This nationally recognized program has prepared local community emergency management and healthcare leaders to design, test, and evaluate their ability to respond to all-hazards events. There are now 95 MEPP graduates within CSEPP communities.

VI. Conclusion

During FY 2013, FEMA continued its mission to assist communities near the two remaining chemical stockpile sites. Working closely with DA and State and local partners, FEMA continued to accomplish its program goals, with notable progress in the areas of EOCs, interoperable communications systems, and alert and notification systems. Although these three areas were priority projects for the program, capabilities under all twelve programmatic benchmarks were addressed during the fiscal year. As the Army continues to make progress on the construction and systematization of chemical disposal facilities at Pueblo and Blue Grass, CSEPP is positioned to continue its preparedness mission as these communities approach the chemical weapon disposal phase.

A cornerstone of CSEPP is the sharing of best practices, resources, and expertise among all CSEPP communities. This includes the use of IPTs, in the communities and programmatically, which continue to be integral to the successful advancement of CSEPP goals. FEMA remains committed to ensuring that the Colorado and Kentucky CSEPP communities are prepared to respond to and recover from any accident involving the chemical stockpile.

Appendix A: Pueblo, Colorado

Pueblo Chemical Depot, located approximately 14 miles east of Pueblo, Colorado, has safely stored chemical weapons since the 1950s. The depot occupies 23,000 acres and stores 8.5 percent of the original U.S. chemical weapons stockpile in the form of the blister agent mustard in mortars and projectiles.

Destruction of the stockpile is the responsibility of the U.S. Department of Defense's Program Executive Office Assembled Chemical Weapons Alternatives, which oversees the nearly completed construction of the Pueblo Chemical Agent-Disposal Pilot Plant (PCAPP). PCAPP was built to destroy the stockpile of chemical weapons currently in storage at the Pueblo Chemical Depot. The systemization phase—encompassing planning, technical work, training and testing activities required to ensure that systems run safely and smoothly once destruction operations start—is under way.

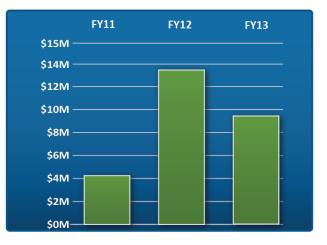
In addition to Federal partners, the Chemical Stockpile Emergency Preparedness Program (CSEPP) in the Pueblo community comprises the State of Colorado, Pueblo City-County Health Department and Pueblo County.

Fiscal Year 2013 Accomplishments

The Pueblo CSEPP community maintained compliance with all 12 benchmarks in Fiscal Year (FY) 2013. Figure 4 illustrates total CSEPP expenditures (grant dollars and federal technical support) to support preparedness in Colorado during the last three fiscal years.

Alert and Notification

In an effort to improve community notification time outside normal business hours and to streamline 911 notifications, Pueblo County is receiving technical support to update its CSEPP notification manual and incorporate enhanced shelter-in-place instructions. This manual will be used by the 911 center in the event of an incident at the stockpile site; planners anticipate that the update will result in reduced community notification time. Initial planning meetings are underway with completion of the final document expected in early 2014.





A robust public warning capacity exists in Pueblo County's emergency response zones to alert the public in the event of an incident at the depot. These systems are designed to warn people both when they are outdoors and indoors, and emergency officials are charged with activating all of these systems to ensure that residents who live in the affected areas receive warnings in timely and efficient ways. Some system components are as follows:

- Four reader boards are strategically located along highways near the depot to alert drivers and provide emergency information to the motoring public.
- Twenty outdoor warning sirens are strategically located throughout the region. These sirens are tested at noon on the second Monday of each month and during the Annual CSEPP Community Exercise in May.
- Tone alert radios (TARs) are located in nearly 1,600 occupied structures in northeastern Pueblo County in areas immediately surrounding the depot. These radios are tested weekly at 10:45 a.m. on Wednesdays.
- An emergency telephone notification system automatically calls landline telephones and other telephones that have opted into the system within the area with recorded messages providing information, warnings, and updates. If a line is busy, the system can redial up to three times; it can also leave messages on answering devices.

Automation

The Colorado Office of Emergency Management and the Pueblo CSEPP community advanced its use of WebEOC®, a web-enabled incident and event management automation system. With access to the Internet, authorized emergency managers and first responders, regardless of location, can enter and view incident information on status boards. Pueblo's use of WebEOC® for common operating picture and situational awareness capabilities has increased information sharing and elevated awareness of regional real-world weather and wildfire events as well as chemical accident potentialities.

Equipping technology at the under-construction emergency services center in Pueblo has been a monumental undertaking. Ensuring infrastructure is in place to support CSEPP up to and including closeout is the responsibility of the Pueblo's information technology team, which has produced detailed spreadsheets, diagrams, and drawings to ensure the facility can support successful accomplishment of all CSEPP benchmarks during a crisis.

Communication

Pueblo has acquired an independent zone controller for the area to control emergency responder radios locally instead of having transmissions fed through Denver. The southern regions believe that the controller project will help eliminate many of the radio "dead spots" that currently exist in the region. Strong coordination with the Colorado Office of Information Technology has allowed the efforts to upgrade community radio communications capability to move forward.

Coordinated Plans

Three notable planning efforts occurred during FY2013:

- The State updated its emergency operations plan, which contains a CSEPP annex.
- A revised Notification Memorandum of Agreement (MOA) between the Pueblo County and the depot was adopted in the first quarter 2013.
- The Pueblo Emergency Operations Plan was converted to Emergency Support Functions from Annexes and is currently undergoing local legal review.

Emergency Operation Centers

The current Pueblo County EOC remains operational, but substantial time and resources have been dedicated to planning and oversight of the new emergency services center. The new facility, which broke ground in December 2012, will serve as the home for the community's 911 center, EOC, Joint Information Center (JIC), and emergency management offices. Construction is scheduled to be completed in early 2014 with occupancy in April 2014.

Exercises

The community successfully completed the 2013 CSEPP Exercise in May. Following the Homeland Security Exercise and Evaluation Program (HSEEP) model, the community has already planned a calendar and objectives document and initial, mid-year and final planning meetings to support the 2014 CSEPP exercise.

Social media accounts on Facebook, Twitter, and Gmail for exercises have been created for the Pueblo Joint Information System (JIS) and JIC, allowing separation of day-to-day agency communication from exercise play. These accounts facilitate hands-on social media training for local volunteers who staff the JIS and JIC, who can train to disseminate protective action and incident information as well as monitor and respond to simulated public and media inquiries.

In 2013, the Colorado CSEPP Recovery Plan Tabletop Planning Group began planning for a series of seminars and workshops involving local, State, and Federal agencies in an interactive dialog regarding recovery efforts and responsibilities as outlined in the Colorado CSEPP Plan. The culminating event will be a 2015 tabletop exercise. While the series is focused on recovery for a CSEPP event, it will also build knowledge of issues that occur in any recovery phase.

Medical Program

The Pueblo Medical Preparedness Workgroup (created in 2012) includes representatives of organizations whose members would provide mutual aid for a CSEPP event, including hospital, emergency medical services (EMS), and fire agencies. In FY 2013, the workgroup coordinated with the depot and PCAPP staff to determine which chemicals are transported through Pueblo County to PCAPP and provide information to first responders and receivers for better preparation and response in the event of a chemical accident during transport.

The workgroup also organized the community in a medical capability assessment that probed the first responder/first receiver community regarding its capabilities for a mass-casualty incident. Participants were asked about the community's mutual aid memorandums of understanding and agreement, equipment, hospital capabilities, transport capabilities, and various other benchmarks to identify strengths and weaknesses. This information will be used during the countywide training and exercise planning workshop to determine needs for the next year.

CSEPP worked with the nine local fire agencies, the EMS provider, and the two hospitals in Pueblo County to agree on a single triage tag. Prior to this, the various agencies used six different tags. Implementing a single tag system will assist the county by preventing duplication of efforts and ensuring that each agency understands the practices of all others regarding triage.

CSEPP provides fit-testing of respirator masks to members of fire and law enforcement agencies in Pueblo County to ensure that they are wearing the correct size mask. During FY 2013, 484 first responders were fit-tested. A video for first responders on donning PPE was also developed by the Pueblo County Emergency Services Bureau Public Information Officer (PIO).

Protective Actions

In Pueblo County, CSEPP provided contractor support for design and automation of an update to the CSEPP Notification Manual, which is to be used by the county's 911 center in the event of an incident at the stockpile site. The revised manual, which will result in reduced community notification time and incorporates enhanced shelter-in-place instructions, will be implemented in the county's new EOC when that facility is completed in FY 2014.

Public Outreach and Education

Public outreach materials, including an annual CSEPP calendar that offers emergency instructions in English and Spanish, continue to be made available to the LEP Spanish-speaking community. For example, during FY 2013, the Pueblo County CSEPP PIO participated in the Los Pobres outreach event in the community of Avondale, adjacent to the Pueblo Chemical Depot. During the event, CSEPP personnel worked alongside interpreters from social service organizations to provide preparedness information to the LEP community. During the annual CSEPP exercise, the Pueblo JIC is staffed with Spanish-language speakers who assist in communicating emergency information to the LEP Spanish-speaking community. Annual training is provided to all JIC call-takers to assist non-English-speaking residents. Pueblo County uses language line services that support multiple languages for LEP residents.

Throughout the fiscal year, Pueblo County CSEPP personnel participated in several outreach events to better educate residents with access and functional needs on the importance of preparing for all-hazard emergencies, including a chemical accident at the Pueblo Chemical Depot. At the end of the year, Pueblo County launched an online emergency registry for persons with access and functional needs. The county uses GIS technology to make the location of the registered individuals available to dispatchers during emergencies.

Continuing the evaluation effort that began in 2003, a seventh outreach survey was conducted within the City of Pueblo and the Pueblo Chemical Depot EPZ on January 7–16, 2013. The survey's purpose was to measure residents' knowledge of CSEPP and to assess their specific knowledge of protective actions and levels of preparedness in the unlikely event of a chemical emergency at the depot. A total of 1,189 residents (388 from Pueblo and 801 in the EPZ) responded to the survey. A business survey was also conducted in January to assess businesses leaders' emergency preparedness knowledge in the City of Pueblo. Eighty-seven businesses responded. The results of these efforts suggest that three key indicators remain at high levels:

- An October 2010 survey of EPZ residents indicated that 91% of residents are aware of the chemical agents at the Pueblo Chemical Depot. Since 2004, the percentage of EPZ residents who are aware of the stockpile has remained above 90%. When the survey area was expanded in 2013 to include City of Pueblo residents who live outside the EPZ, the level of awareness was 86%.
- The confidence of residents within the EPZ that they will be notified quickly in the event of a chemical emergency has increased from 76% confidence in 2004 to 80% confidence in a survey conducted in October 2010. In 2013, residents in both the city and EPZ indicated 86% confidence that that would be notified in the event of a chemical emergency.
- Confidence that EPZ residents are able to protect themselves and their families in the event of a chemical emergency has also risen from 72% in 2005 to 77% in 2010. When residents in both the City of Pueblo and the EPZ were asked in 2013, 74% indicated that they are able to protect themselves and their families in the event of a chemical emergency.

The approaching startup of chemical agent destruction activities is expected to increase attention on the Pueblo Chemical Depot. The Pueblo CSEPP community launched a 2-year media campaign (*Prepare Pueblo*) in late 2013 to maintain the positive trends noted above and improve residents' knowledge of the specific CSEPP planning zones in the county. Messages (e.g., talk about preparedness with your family, know your zone) are rotated each quarter among billboards, newspaper, radio, and direct mail items. To provide additional information for outreach campaign planning and to monitor the reach and understanding of outreach messages, the Pueblo public affairs community expanded the survey reach in 2013 to include residents both within the EPZ and the City of Pueblo.

The Pueblo CSEPP community uses geographic information system maps to enhance online communications for public outreach. Lessons learned from the past two fire seasons have reinforced the need for a simple map with incident-specific information that the public and media can access from their mobile devices. The project includes importing the CSEPP zones into a

Google map, with background information for each zone (including average population and boundaries). During the 2013 annual CSEPP exercise, Pueblo JIC staff demonstrated their ability to quickly and easily modify the map to add other incident-specific information such as locations of road closures and shelters. The map can be quickly disseminated through a variety of traditional and social media methods including email, posting to the Pueblo JIC website, and using Twitter. The State of Colorado also created and launched a new website for the State Division of Homeland Security and Emergency Management (http://www.dhsem.state.co.us/).

The Colorado Office of Emergency Management provided six basic PIO courses and three JIC courses in multiple locations across the State and met with PIO groups in each of Colorado's regions to strengthen and build the Joint Information System.

Training

Pueblo continues to build a sustainable exercise and training program. The Pueblo CSEPP community conducted the FEMA-instructed Exercise Evaluation and Improvement Planning course. Attendees included Federal, State, county, and city emergency managers and public health and hospital emergency management personnel. The Master Exercise Practitioner Program (MEPP) for designing and evaluating response to all-hazards events by emergency management practitioners is planned for FY 2014. Marketing and preparation for more than 60 MEPP potential students, assisting them with their packets and prerequisites, is underway.

CSEPP staff continues to provide courses in public affairs and information, the Incident Command System (ICS), new technology, videography, and hazardous materials. The State hosted a JIC/JIS course in August 2013 and is offering social media trainings in September.

Pueblo County CSEPP staff continues to support the Pueblo community with exercise program management and attend its Training and Exercise Planning Workshop and Improvement Planning Workshop. In 2013, two Pueblo CSEPP members will complete the State Emergency Management Academy, which continues to host various ICS, public affairs, and medical trainings.

Medical Training

The following training related to medical preparedness has been sponsored by CSEPP:

- Two 8-hour classes on hospital hazardous materials operations were provided for new hospital employees, and four 4-hour refresher classes were provided.
- Training on mustard agent and caustic chemicals was given to physicians from throughout Pueblo County in conjunction with the Pueblo County Medical Society.
- A course for hospitals and healthcare organizations on disaster preparedness and response in various emergency situations was provided for healthcare agencies.

- Two 20-hour classes were taught to inform participants about hazardous materials tankers that carry caustic chemicals such as sodium hydroxide, which is transported through the county to support destruction operations at the PCAPP.
- A moulage class was taught to approximately 25 members of Pueblo's first responder/first receiver community, who are now available to assist in exercises where moulage is needed to increase realism for the medical community.
- Two 4-hour trainings on decontamination, including lecture and field sessions to practice actual decontamination, were given at Parkview Medical Center.

Appendix B: Blue Grass, Kentucky

Blue Grass Army Depot is located south of Lexington, Kentucky, near the city of Richmond. The depot sits on 15,000 acres and is responsible for safe storage, monitoring, and ultimately the disposal of its stockpile of chemical weapons. The stockpile is maintained on 255 acres of land near the northern border of the depot. Storage of blister agent began in 1944, and nerve agent storage commenced in the mid-1960s. The safe storage of the chemical stockpile remains an important mission of the Blue Grass Chemical Activity.

Destruction of the stockpile is the responsibility of the U.S. Department of Defense's Program Executive Office, Assembled Chemical Weapons Alternatives. Construction of the Blue Grass Chemical Agent-Disposal Pilot Plant (BGCAPP) is under way. BGCAPP is being built to destroy the stockpile of chemical weapons currently in storage at Blue Grass. The plant will use neutralization followed by supercritical water oxidation to destroy 523 tons of munitions containing blister and nerve agents.

In addition to Federal partners, the Blue Grass CSEPP community comprises the Commonwealth of Kentucky; Madison, Estill, Clark, Garrard, Rockcastle, Powell, Laurel, Jackson, and Jessamine counties; and the Lexington-Fayette Urban County Government (LFUCG).

Each CSEPP community has designated emergency planning zones. CSEPP zones are defined geographical areas surrounding a facility that poses a potential to release airborne hazardous chemicals in the event of an accident or incident. They serve two main functions in the program. First, the zones define the area that is included in the program. Secondly, the zones are subdivided into subzones that would serve an important role in protective action decision making and public alert/notification in the event of an emergency. Zones most at risk from a chemical release are called Immediate Response Zones (IRZs); these are located in Madison and Estill counties, which are thus referred to as IRZ counties. Zones farther out from the hazard are designated as Protective Action Zones (PAZs); Clark, Garrard, Rockcastle, Powell, Jackson counties and LFUCG contain some PAZ areas and are thus referred to as PAZ counties. Laurel and Jessamine counties are designated as host jurisdictions. A host jurisdiction is not considered to be at direct risk from a chemical stockpile accident, but participates in CSEPP by providing decontamination and medical treatment, mass care, host facilities, and mutual aid support to atrisk jurisdictions.

During Fiscal Year (FY) 2011, FEMA commissioned an updated risk assessment study for the Blue Grass community. This study evaluated potential chemical accidents during storage and demilitarization at Blue Grass; meteorological conditions of the area based on historic weather data; local terrain; and the current community protective action strategy. The study concluded that areas of southern Fayette County were at slightly higher risk and some areas of Estill County

were at significantly higher risk than originally determined. Consequently, in FY 2012, FEMA and the Blue Grass community revised the Kentucky CSEPP emergency planning zones to add one PAZ in southern Fayette County and to reassign two existing Estill County zones from PAZ status to IRZ status. The community has revised its planning zone maps, and the Army revised its hazard model to incorporate the new zones. The Blue Grass community is currently revising its response plans and emergency public information materials to fully address these changes.

Fiscal Year 2013 Accomplishments

The Blue Grass CSEPP community maintained compliance with all 12 benchmarks in FY 2013. Figure 5 illustrates total CSEPP expenditures (grant dollars and federal technical support) to support preparedness in Kentucky during the last three fiscal years.

IPAWS Implementation

The Commonwealth of Kentucky is participating in a pilot program to plan and implement IPAWS across three primary sectors: governance, technology, and messaging.

> The governance team created draft plans for Kentucky and three primary documents that can be used by others to assist with IPAWS planning: a State IPAWS plan template, an IPAWS plan



Figure 5: Kentucky CSEPP Programmatic Spending

development document, and an IPAWS memorandum of understanding template.

- The technology team determined three primary routes through which it envisioned messaging is to be distributed: National Weather Service radio, the Emergency Alert System (EAS), and Wireless Emergency Alerts (WEAs). The team then developed a list of functions that an IPAWS-capable system should be able to perform. This list can be modified based on an agency's specific needs.
- The messaging team discussed changes in messaging lengths and character counts to meet IPAWS requirements. Two templates were created: an IPAWS messaging template and an IPAWS messaging template with SMS.

After a series of stakeholder meetings, Madison County has submitted a waiver request to the Federal Communications Commission (FCC) to allow it to test WEA functions of IPAWS with EAS and IPAWS Compliant Wireless Communication Devices. A waiver of FCC rules is required because the rules currently prohibit local agencies from testing the full system from the initiator to the user devices.

To perform this pilot test, four documents were developed: an IPAWS Test Plan Draft, letters of authorization from Madison County to wireless providers and broadcasters, a survey form for WEA providers, and a survey form for broadcasters. Data collection began with an information request to WEA providers and broadcasters that serve the Madison County area. Meetings with a representative from the Kentucky Broadcasters Association have been conducted. Letters of support have been requested from the broadcasters; several letters have been received.

The IPAWS test is scheduled for FY 2014 to align with Madison County's normal monthly public alert system testing. Wireless providers in Madison County have been invited to attend a conference call to discuss the test and waiver request.

In Madison and Estill counties, EAS cable-interrupt of local cable TV and/or FM radio is available. Equipment has been procured to comply with FCC requirements (CAPS and IPAWS), and county staff is currently training on the new systems. Satellite communications between BGCA and Madison County is also in place.

Madison County provides strobe lights and pillow-shaking devices attached to Advisor Alert Radios and used in homes of persons with access and functional needs. Radios would be activated during a chemical incident at Blue Grass Chemical Depot to alert residents to an emergency.

Public Outreach and Education

The Kentucky CSEPP community has full-time public information officers on staff at the Blue Grass Army Depot, Madison County, Estill County, and State CSEPP office. The team of public information and public affairs officers engages in a variety of activities to educate residents on what to do in the event of a chemical accident and maintains a capability to deliver emergency public information during disasters.

In March 2013, the Blue Grass CSEPP community launched a media campaign using television, radio, and billboards to increase the public's emergency preparedness. A Public Affairs Working Group was formed by the community Integrated Process Team to work collaboratively with State and county stakeholders to engage a consultant to assist with the campaign, plan campaign content, and develop an implementation plan. A new website, PrepareKY.com, was designed and launched that contains county-specific emergency preparedness and CSEPP information. The campaign also includes social media channels to better reach residents. In addition, the Madison County website was redesigned to be more user-friendly with improved CSEPP and all-hazard preparedness information.

During the fiscal year, several public outreach efforts to reach residents with functional and access needs were completed. The Madison County CSEPP PIO made presentations to staff and clients of centers which provide care and job tasks for mentally challenged residents. Printed information is also provided to home-bound residents who receive in-home care from health department personnel. These county health nurses are provided with extra calendars that provided emergency information. Outreach is also provided to caregivers of residents with functional and access needs.

Madison County continued its participation in a migrant worker program sponsored by the county school system. The Madison County CSEPP PIO worked through the school system to deliver emergency preparedness information to LEP families and their children. During FY 2013, the PIO presented emergency information with the assistance of a Spanish-speaking interpreter to LEP persons during an outreach event at a local school.

In addition to in-person events, the Kentucky CSEPP program provides bilingual public outreach materials. Preparedness material in both English and Spanish, addressing both all-hazard and CSEPP-specific information, is included in the annual CSEPP calendar distributed to local residents. Print ads from the new outreach campaign have been translated into Spanish to run in the local *La Voz* magazine.

Madison County maintains a confidential, protected Functional Needs Database that can be used to locate and assist residents with functional or access needs during emergencies. The annual emergency calendar provided to each household in the county has instructions for residents who wish to provide information for the database.

Revision of County Incident-Specific CSEPP Plans

The Blue Grass CSEPP community formed a work group to develop CSEPP incident-specific plans. These are hazard-specific plans that address detailed response actions to a particular type of hazard, including a chemical stockpile emergency. They augment all-hazards emergency operations plans maintained by the State and counties. The workgroup developed a draft incident-specific plan template using an emergency support function format, which provides the structure for grouping functions most frequently used by emergency managers during disasters. Planners are currently populating the template and will hold a seminar-style review of the plans in October 2013. The group's efforts will culminate with a plan validation tabletop exercise tentatively scheduled for summer 2014 with the goal of finalizing plans before the September 2014 full-scale CSEPP exercise.

Special Facilities

As a result of population growth, Madison County requested that certain additional institutional facilities—health care facilities, schools, child care centers, and facilities serving people with access and functional needs—be evaluated to ensure that current protective action strategies meet the program's maximum protection requirement. FEMA initiated an analysis of the identified

facilities and will evaluate protection factors and, upon completion of the study, work with the community to identify and fund necessary enhancements as required.

County WebEOC® Implementation

All CSEPP counties in Kentucky use the web-based incident and management automation system, WebEOC®. Kentucky CSEPP uses regional boards that permit information to be posted regionally and viewed by all State and county connected systems to create a single-fused system at Kentucky Emergency Management and the Kentucky Department of Public Health. Having all CSEPP jurisdictions use the same information management system enhances the ability of each community to share emergency information and simplifies system management.

Emergency Operations Centers

Commonwealth of Kentucky

CSEPP and the Commonwealth provided funding for a new EOC for the Kentucky Division of Emergency Management in Frankfort. The new facility was completed in August 2013. The renovated facility houses Commonwealth emergency management personnel, the state EOC, and training and meeting facilities used by CSEPP and other emergency management programs. In addition to the EOC, construction of an antenna farm for statewide emergency communications is underway. This project will allow enhanced communications capability between Kentucky Emergency Management and its federal, state, and local partner agencies even during severe weather. It is scheduled to be completed in 2014.

Madison County

Madison County determined that its 25-year-old EOC needed expansion and modernization to meet current emergency operation needs. An architect and engineering firm was hired to design the renovation and expansion of the existing facility. When completed, this project will combine the County 911 dispatch center and emergency management offices in one location. Emergency personnel located in the current facility will temporarily relocate to the backup EOC during the construction period to facilitate quicker construction. The project is scheduled for completion in 2015.

Estill County

Based on updated risk analyses, three sections of Estill County were designated as immediate response zones in 2012. As a result of this designation, a study of the existing siren system is underway to evaluate the notification of residents of a stockpile accident and to determine if additional emergency sirens are needed.

Work is also underway to upgrade existing communications towers throughout the county. In addition to upgrading to a voted APCO Project 25 standard radio system, one communication tower site is being upgraded and a new tower site is being developed. The second site is being developed with an adjoining county to provide better first-responder radio coverage along a

CSEPP emergency evacuation route. This project will ensure that the system meets the county's emergency communications needs.

Clark County

During the fiscal year, Clark County provided property and negotiated land development of water and sewer on the site selected for a new emergency operation center. The building will house the EOC and the 24-hour warning point. Construction bids were opened in July 2013 and construction of the new facility is scheduled for completion in 2014.

Garrard County

Garrard County is planning for design and construction of a new EOC, for which it has provided land. The EOC will provide space to co-locate the 24-hour warning point and 911 Center. A request for proposal for architectural and engineering services was released in July 2013. Design will begin following selection of an architectural and engineering firm. The project is scheduled for completion in 2015.

Lexington-Fayette Urban County Government

LFUCG is planning an expansion of its EOC, which will be constructed within an existing government building. This renovation will provide a modernized facility to centralize all county emergency communications functions (law enforcement, EMS, 911, fire suppression, hazmat, and public works) with the EOC. The new facility is currently being designed, and the project is scheduled for completion in March 2015. A Reverse 911 system is in final stages of deployment.

Rockcastle County

Rockcastle County initiated planning for a new EOC, including providing a site for the facility. Design for the EOC has been completed, and, when constructed, it will centralize EOC and 911 communications operations. Ground was broken and construction began July 11, 2013, and the project is scheduled for completion in August 2014.

Powell County

Powell County has begun planning a new EOC, for which it has provided property. The design underwent several revisions to balance the county's needs with its budget. Construction of the new facility is underway and is scheduled for completion in March 2014.

In addition to the new facility, a new tower site has been designed to provide coverage for the CSEPP IRZ and PAZ areas in Powell and Estill counties. The property agreement is in place and the design completed; procurement specifications are in progress. The tower project is scheduled for completion in 2014.

Jackson County

FEMA supported Jackson County with grounding improvements at the current EOC in accordance with industry standards and replaced radio equipment and workstations damaged by

a lightning strike. The county provided property for a new EOC and has provided labor and equipment to clear the land. A request for proposal for architect and engineering services to design an EOC structure was released in June 2013; proposals have been received by the county pursuant to making a selection. The project is scheduled for completion in 2015.

Jessamine County

FEMA supported Jessamine County with an upgrade to its radio system, including purchasing and integrating APCO Project 25–capable equipment to enhance radio communication interoperability. Tower-site grounding was reviewed and a recommendations report was prepared. The recommendations will be used to develop plans to improve the grounding of the communications equipment at tower sites.

Laurel County

FEMA supported Laurel County with the design and purchase of UHF and VHF APCO Project 25 radio equipment to enhance interoperability within the CSEPP planning area. Tower site grounding was reviewed and recommendations documents were prepared. The recommendations will be used to develop plans to improve the grounding of the communications equipment at the respective tower sites.

Appendix C: CSEPP Stakeholders

State of Colorado

- Pueblo Chemical Depot
- Colorado Division of Homeland Security and Emergency Management
- Pueblo County (Immediate Response Zone [IRZ])
- Pueblo City-County Health Department

Commonwealth of Kentucky

- Blue Grass Army Depot
- Kentucky Division of Emergency Management
- Clark County (Protective Action Zone [PAZ])
- Estill County (IRZ)
- Fayette County (PAZ)
- Garrard County (PAZ)
- Jackson County (PAZ)
- Jessamine County (Host)
- Laurel County (Host)
- Madison County (IRZ)
- Powell County (PAZ)
- Rockcastle County (PAZ)

Appendix D: Acronyms

ACWA	Assembled Chemical Weapons Alternatives
BGCAPP	Blue Grass Chemical Agent-Disposal Pilot Plant
CA	Cooperative Agreement
CAP	Common Alerting Protocol
CDC	Centers for Disease Control and Prevention
CEU	Continuing Education Unit
CFR	Code of Federal Regulations
CMAS	Cellular Mobile Alert System
CMRS	Commercial Mobile Radio Service
CSEPP	Chemical Stockpile Emergency Preparedness Program
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
DA	Department of the Army
DHS	U.S. Department of Homeland Security
DoD	U.S. Department of Defense
EAS	Emergency Alert System
EMI	Emergency Management Institute
EOC	Emergency Operations Center
FCC	Federal Communications Commission
FEMA	Federal Emergency Management Agency
FY	Fiscal Year
HazMat	Hazardous Materials
HAZWOPER	Hazardous Waste Operations and Emergency Response
ICS	Incident Command System
IMT	Incident Management Team
IPAWS	Integrated Public Alert and Warning System
IPT	Integrated Process Team
IRZ	Immediate Response Zone
JIC	Joint Information Center
JIS	Joint Information System
LCCE	Lifecycle Cost Estimate
LEP	Limited English Proficiency
LFUCG	Lexington-Fayette Urban County Government
MEPP	
	Master Exercise Practitioner Program
MEU	Medical Education Units
MEU MOA	Medical Education Units Memorandum of Agreement
MEU MOA MOU	Medical Education Units Memorandum of Agreement Memorandum of Understanding
MEU MOA MOU NIMS	Medical Education Units Memorandum of Agreement Memorandum of Understanding National Incident Management System
MEU MOA MOU NIMS OSHA	Medical Education Units Memorandum of Agreement Memorandum of Understanding National Incident Management System Occupational Safety and Health Administration
MEU MOA MOU NIMS OSHA PA	Medical Education Units Memorandum of Agreement Memorandum of Understanding National Incident Management System Occupational Safety and Health Administration Public Affairs
MEU MOA MOU NIMS OSHA PA PAZ	Medical Education Units Memorandum of Agreement Memorandum of Understanding National Incident Management System Occupational Safety and Health Administration Public Affairs Protective Action Zone
MEU MOA MOU NIMS OSHA PA	Medical Education Units Memorandum of Agreement Memorandum of Understanding National Incident Management System Occupational Safety and Health Administration Public Affairs

PIO	Public Information Officer
PMT	Program Management Team
PPE	Personal Protective Equipment
SEOC	State Emergency Operations Center
TAR	Tone Alert Radio
U.S.C.	United States Code
UHF	Ultra High Frequency
USACE	U.S. Army Corps of Engineers
VHF	Very High Frequency
WEA	Wireless Emergency Alert



Homeland Security