



Chemical Stockpile Emergency Preparedness Program

Fiscal Year 2019 Report to Congress

February 27, 2020



Homeland
Security

Federal Emergency Management Agency

Foreword



I am pleased to present the Chemical Stockpile Emergency Preparedness Program (CSEPP) Fiscal Year (FY) 2019 Report to Congress prepared by the Federal Emergency Management Agency (FEMA).

This report is being submitted to Congress in response to requirements set forth in 50 United States Code (U.S.C.) § 1521(e)(2)(C), which directs that the Administrator shall transmit a report to Congress no later than December 15 of each year on activities regarding the program to assist State, tribal nations, and local governments in developing capabilities to prepare for and respond to incidents and/or accidents and other emergencies resulting from, among other things, the storage or destruction of the military's lethal chemical agents and munitions. The report covers activities for FY 2019 and includes a site-by-site description of actions taken to assist State and local governments (either directly or through FEMA) in carrying out functions relating to emergency preparedness and response.

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

The Honorable James Inhofe
Chairman, Senate Committee on Armed Services

The Honorable Jack Reed
Ranking Member, Senate Committee on Armed Services

The Honorable Adam Smith
Chairman, House Committee on Armed Services

The Honorable Mac Thornberry
Ranking Member, House Committee on Armed Services

The Honorable Richard Shelby
Chairman, Senate Appropriations Subcommittee on Defense

The Honorable Richard J. Durbin
Ranking Member, Senate Appropriations Subcommittee on Defense

The Honorable Peter Visclosky
Chairman, House Appropriations Subcommittee on Defense

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The Honorable Ken Calvert
Ranking Member, House Appropriations Subcommittee on Defense

Inquiries relating to this report may be directed to our Office of External Affairs, Congressional and Intergovernmental Affairs Division at (202) 646-4500.

Sincerely,

A handwritten signature in blue ink, appearing to read "PTG", followed by a horizontal line.

Peter T. Gaynor
Administrator
Federal Emergency Management Agency

Executive Summary

The Chemical Stockpile Emergency Preparedness Program (CSEPP) is a whole community partnership that unites the States of Kentucky and Colorado, the impacted communities and local governments, volunteer organizations, and the private sector with the Federal Emergency Management Agency (FEMA), United States Army, and multiple Federal departments and agencies. The CSEPP mission is to “enhance existing installation, local, State, tribal, 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 U.S. Army chemical stockpile.”¹ This effort aligns with FEMA’s strategic goal to build a culture of preparedness in our communities. In Fiscal Year (FY) 2019, CSEPP continued to fulfill that mission.

Fiscal Year 2019 marked an important milestone in the program. The Blue Grass Army Depot in Kentucky began agent destruction operations in June, joining the Pueblo Chemical Depot that began agent destruction in 2015. FEMA has been fulfilling, and will continue to fulfill, its preparedness mission in the participating CSEPP communities until the stockpile is completely destroyed. Planning for the eventual closeout of CSEPP is underway in both CSEPP communities and will continue to be a program priority this year, while not losing sight of our preparedness mission.

CSEPP has completed this mission in the communities surrounding six of the original eight chemical stockpile locations in the United States. Thanks in part to congressional support of this program and through the program use of a holistic approach to emergency preparedness, these communities are better prepared to respond to all threats and hazards in an integrated and coordinated manner. This year, the remaining two CSEPP communities met their preparedness goals through collaborative program management, including integrated process teams that brought partners together to identify program needs, develop alternatives, and implement solutions.

Specific CSEPP activities in Colorado and Kentucky during FY 2019 include the following:

- Reviewed and updated the coordinated emergency plans, including county emergency operations plans, joint information center plans, and program closeout plans;
- Maintained and enhanced interoperable emergency communications systems, including planning for the critical replacement of equipment as it nears its lifecycle end;
- Promoted improved inclusive preparedness in CSEPP communities;
- Conducted two full-scale emergency exercises (jointly managed by the U.S. Army and FEMA) and produced after-action reports with corrective action plans;

¹ *Chemical Stockpile Emergency Preparedness Program Strategic Plan*, July 2019, p. 1

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- Educated at-risk residents on emergency protective actions and trained emergency management and response personnel;
- Added Integrated Public Alert and Warning System² capabilities in CSEPP communities, resulting in the use of Wireless Emergency Alert messages in Madison County, KY, for non-CSEPP related emergencies;
- Improved community resilience by identifying and improving the core capabilities necessary to prepare for, respond to, and recover from a chemical accident at one of the remaining chemical weapons stockpile sites;
- Promoted and fostered a culture of preparedness across the whole of each CSEPP community; and,
- Improved CSEPP mission readiness by using emergency management capabilities during disasters such as wildfires and severe storms. Evaluations of after-action reports for these events enhanced CSEPP readiness by identifying emergency response improvements.

Details on these and other activities for the fiscal year are in Appendices A and B.

These activities exemplify FEMA’s mission “to help people before, during, and after disasters.” Further, these program efforts were designed to enhance community resilience for all hazards they may encounter.

This report 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.

² <https://www.fema.gov/integrated-public-alert-warning-system>



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I. Legislative Requirements

Pursuant to 50 United States Code (U.S.C.) § 1521(e), the Department of the Army and FEMA entered into a memorandum of understanding (MOU) beginning in 1988 under which the U.S. Army provides funds to FEMA to support the mission of the Chemical Stockpile Emergency Preparedness Program (CSEPP): to assist State, tribal, and local governments in carrying out functions related to emergency preparedness and response in communities that surround military installations storing and disposing of chemical warfare agents and munitions (offsite). The U.S. Army retained responsibility for comparable activities to protect depot personnel (onsite).

The U.S. Department of Homeland Security (DHS), Federal Emergency Management Agency (FEMA) submits the Fiscal Year (FY) 2019 Annual Report to the U.S. Congress in accordance with requirements set forth in 50 U.S.C. § 1521(e)(2) which directs the following:

(A) In coordination with the Secretary of the Army and in accordance with agreements between the Secretary of the Army and the Administrator of the Federal Emergency Management Agency, the Administrator shall carry out a program to provide assistance to State and local governments in developing capabilities to respond to emergencies involving risks to the public health or safety within their jurisdictions that are identified by the Secretary as being risks resulting from—

(i) the storage of lethal chemical agents and munitions referred to in subsection (a) at military installations in the continental United States; or

(ii) the destruction of such agents and munitions at facilities referred to in subsection (d)(1)(B).

(B) Assistance may be provided under this paragraph for capabilities to respond to emergencies involving an installation or facility as described in subparagraph (A) until the earlier of the following:

(i) The date of the completion of all grants and cooperative agreements with respect to the installation or facility for purposes of this paragraph between the Federal Emergency Management Agency and the State and local governments concerned.

(ii) The date that is 180 days after the date of the completion of the destruction of lethal chemical agents and munitions at the installation or facility.

(C) 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.

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This report reflects the status of CSEPP accomplishments and ongoing activities to provide maximum protection for residents in the 2 States and 11 counties that participated in CSEPP in FY 2019. The status of stockpile demilitarization and related information may be found in the U.S. Department of Defense's (DOD) *Chemical Demilitarization Program Semi-Annual Report to Congress*.

II. Background

CSEPP is a whole community partnership that unites FEMA, the U.S. Army, multiple Federal departments and agencies, 2 State governments, 11 counties, volunteer organizations, and the private sector. Its mission is to enhance existing local, U.S. Army 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 U.S. Army chemical stockpiles at the Pueblo Chemical Depot (PCD) in Colorado and Blue Grass Chemical Activity (BGCA) at Blue Grass Army Depot (BGAD) in Kentucky.

CSEPP partners share a common goal: to build resilient communities and a culture of preparedness to protect citizens in the unlikely event of a chemical emergency at the Nation's two remaining chemical weapons stockpile sites. CSEPP's vision is "a fully prepared team of local, installation, tribal nation, State, and Federal professionals developing and executing an efficient and cost-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 U.S. Army chemical stockpile." This mission is accomplished by working with program partners to encourage personal and family preparedness through outreach to residents to educate them on their role in an emergency and by involving community organizations in emergency planning and exercises.

The program uses integrated process teams (IPTs) to identify preparedness capability needs and funding requirements for program partners. IPTs enhance collaborative engagement among the States (Kentucky and Colorado), the U.S. Army, and FEMA, resulting in a shared vision for prepared communities. CSEPP utilizes the tenets of the National Preparedness System to outline and organize the communities' processes to conduct their preparedness activities by providing technical assistance, training, exercising, and public outreach and education programs and achieve the National Preparedness Goal, National doctrine, including the National Incident Management System (NIMS), Incident Command System (ICS), and Homeland Security Exercise and Evaluation Program (HSEEP). FEMA continually monitors the progress of funded projects and assesses community preparedness through quarterly reporting, community profile self-assessment, and the Threat and Hazard Identification and Risk Assessment (THIRA) process. Although the program ends with the destruction of the chemical warfare agent stockpile, CSEPP is engaged at all levels to build sustainable, enduring capabilities that will continue to benefit the community long after the stockpile is eliminated.

III. Program History

CSEPP is a partnership between the U.S. Army and FEMA that began with the signing of an MOU in August 1988. Under this agreement, the U.S. Army Chemical Materials Activity (CMA) provides for onsite protection and funding to FEMA to assist State, tribal, and local governments in carrying out emergency management functions offsite. This enhances the abilities of the civilian communities neighboring the CSEPP sites to respond to potential chemical warfare agent emergencies. The MOU also established a framework for collaborating with potentially affected State, tribal, and local governments to provide for public health and safety; identify roles and responsibilities; and establish joint program efforts in planning, training, exercising, and exchanging information.

As the program matured, the MOU was reaffirmed and revised; a 1997 revision (reaffirmed in 2004) gave FEMA responsibility and accountability for all aspects of emergency preparedness for the surrounding communities. The U.S. Army maintains responsibility for emergency preparedness measures onsite at the facilities.

CSEPP Fiscal Year 2019 Partners

- Pueblo Chemical Depot
- Blue Grass Army Depot
- 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

CSEPP also operates under a strategic plan, updated in 2019, that reflects a coordinated effort between the U.S. Army's Chemical Materials Activity and FEMA's Technological Hazards Division to develop and implement a customer-centered planning process. The plan communicates the CSEPP mission, vision, and end state achieved through the accomplishment of two strategic goals: 1) maintain and sustain CSEPP enhanced preparedness and 2) ensure successful CSEPP closeout. The program achieves these goals through actions required and performance indicators within 12 benchmark capabilities (which provide the structure for this Report). The strategic plan aligns with the three Strategic Goals of the 2018–2022 FEMA Strategic Plan and links the program to the five mission areas and 32 core capabilities of the National Preparedness Goal. The Strategic Plan and an explanation of how the CSEPP Program Benchmarks align with the National Preparedness System.³

³ <https://www.cseppportal.net/SitePages/about-csepp.html>

Figure 1 depicts chemical weapons stockpile locations that remain operational and locations where the U.S. Army has completed destruction of the stockpile.

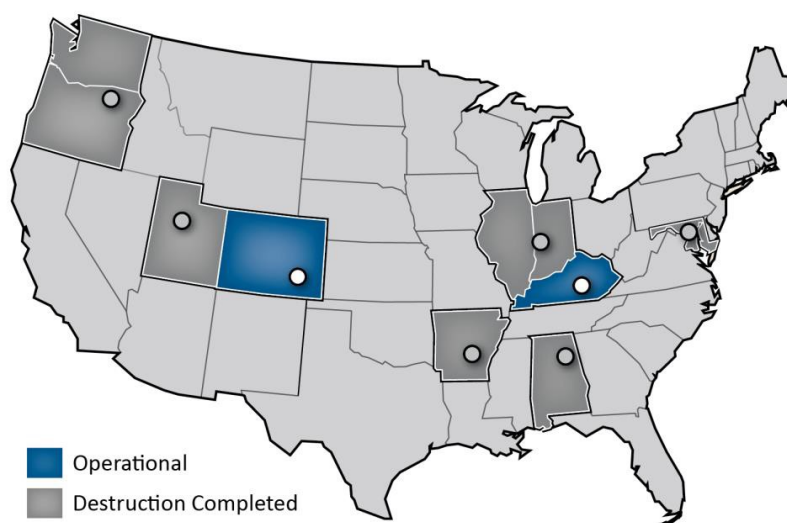


Figure 1: Current and Previous Chemical Stockpile Locations

Originally, CSEPP comprised 10 States, 40 counties, and the Confederated Tribes of the Umatilla Indian Reservation (CTUIR) located in Oregon. Maryland, Indiana, Illinois, Alabama, Arkansas, Utah, Washington, Oregon, and the CTUIR have completed their CSEPP mission and have been closed out of the program. In FY 2019, CSEPP focused on the remaining stockpiles at PCD in Colorado and BGCA at BGAD in Kentucky. Appendix A details CSEPP activities in Colorado, and Appendix B details activities in Kentucky.

In FY 2019, 11 counties (one in Colorado and ten in Kentucky) participated in CSEPP. Three of these counties are in immediate response zones (IRZs), generally within a 6-mile radius of where chemical warfare agents are stored. Six counties are in protective action zones (PAZs), which are outside the IRZs but within 6 to 31 miles of stockpile locations. The remaining two counties serve as host counties; they are not at direct risk from a chemical stockpile accident but instead would provide decontamination and medical treatment, mass care, host facilities, and mutual aid support to at-risk jurisdictions. Appendix C lists specific active program partners.

Collaboration

Working in a collaborative environment with their partners, CSEPP is responsible for the following tasks:

- Assisting States and counties in identifying program needs and developing long-term budget goals and objectives;
- Supporting CSEPP States in developing response plans;

- Developing, delivering, and evaluating training;
- Providing technical assistance;
- Developing and sustaining programs for evaluating offsite readiness, including a robust exercise program jointly managed by FEMA and the U.S. Army; and
- Overseeing CSEPP funds that are used for community preparedness.

In addition to State and local partners, CSEPP collaborated with the FEMA National Integration Center (NIC) to build FEMA's implementation of Section 1236 of the Disaster Recovery Reform Act of 2018, which directs FEMA to provide guidance and annual training for state, local, tribal and territorial governments, first responders, and facilities that store hazardous materials, on the coordination of emergency response plans in the event of a major disaster, to include severe weather events. CSEPP worked with the NIC and U.S. Fire Administration (USFA) on FEMA's Hazardous Materials Incidents guidance, released in August 2019.⁴

CSEPP continued collaboration with the DHS Office for Civil Rights and Civil Liberties (CRCL) to expand the program's outreach and support to populations with disabilities and limited English proficiency (LEP). Using experience from communities that are now closed out, CSEPP assisted CRCL with understanding how to provide alert, warning, and emergency communication for people with LEP. CSEPP also worked with State and local partners to revise plans and expand exercises to examine their capability to provide support to people with access and functional needs.

NPAD and the FEMA National Integration Center assisted CSEPP in integrating national doctrine into CSEPP's Notice of Funding Opportunity, which enabled consistency with other FEMA non-disaster grants. CSEPP provided the FEMA National Exercise Division (NED) subject matter expertise in developing a tabletop exercise package for chemical hazard exercises available to assist communities across the Nation.

During the fiscal year, CSEPP collaborated with FEMA's NED to promote information sharing and cross-training opportunities, which included an introduction to the capabilities of FEMA's Preparedness Toolkit (PrepToolkit)⁵ as a collaborative reference space for CSEPP partners. NED provided a PrepToolkit "Boot Camp" in Pueblo, CO on August 22, 2019.

Funding Administration

FEMA engages with State and local partners throughout the planning, programming, budgeting, and execution cycle, including helping to assess program needs, developing and validating

⁴ https://www.fema.gov/media-library-data/1566393023589-8134367aaf67f65c7a159453c0b8c27b/Hazardous_Materials_Incidents.pdf

⁵ <https://preptoolkit.fema.gov/>

budgets, administering program funds, and closing out a site once the chemical destruction mission is completed.

FEMA and the U.S. Army cooperate closely and coordinate their efforts. Together, they manage the program and maintain performance through regular joint meetings; common budgeting, cost accounting, and performance management systems; and aggressive program-integration efforts (see Figure 2). FEMA validates the preparedness requirements of the surrounding communities and develops a budget in coordination with State and local governments. These budget requests are then incorporated into the DOD budget submissions to Congress. The U.S. Army transfers appropriated funds to FEMA, which has full authority and responsibility for their distribution and expenditure. FEMA awards funding to the States under CSEPP cooperative agreements (CAs) that include annual work plans negotiated between each State and its FEMA Regional office.

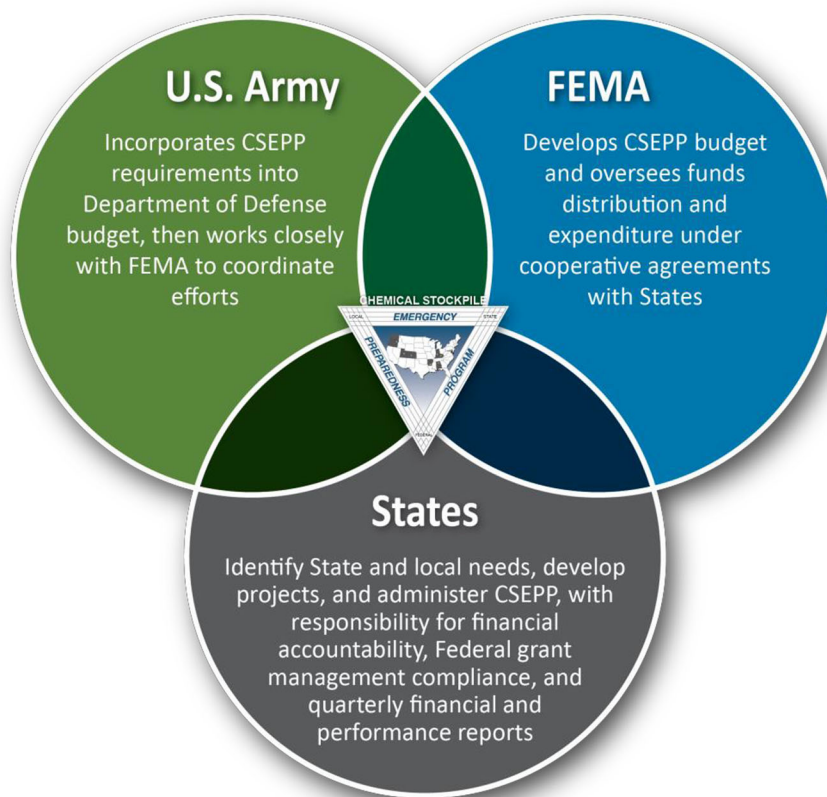


Figure 2: CSEPP Program Integration

As the recipients, the States administer CSEPP CA funds. 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 involved in the proposed projects. The States are responsible for financial accountability in compliance with Federal grant management rules and for providing associated financial and performance reports on a frequency that addresses the capability improvement and purpose intended through the program funds. Local

governments are sub-recipients of these funds. This paradigm is reflective of FEMA’s enterprise-level approach to emergency management, which focuses on supporting State, local, tribal, and territorial partners.

In August 2019, the U.S. Department of Homeland Security’s Office of the Chief Financial Officer, Financial Assistance Policy and Oversight (FAPO) performed an onsite review of FEMA’s CSEPP awards, files, and tools to determine accordance with financial management

“The efforts employed by FEMA in the management of this program can serve as a guiding framework for other programs.”

— FAPO

policy and Office of Management and Budget criteria. FAPO concluded that CSEPP is well administered by FEMA officials in Headquarters (HQ) and FEMA Regions IV and VIII who are responsible for managing the Kentucky and Colorado CSEPP awards. FAPO provided six recommendations to ensure consistency and continued success for managing the CSEPP CAs.

From CSEPP’s inception in 1988 through the end of FY 2019, FEMA has allocated approximately \$1.42 billion to states and the CTUIR under annual CAs or through FEMA-managed contracts. The allocation of resources is tracked according to the CSEPP organization (including the U.S. 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 does not necessarily reflect the complete set of benefits that communities have received through CSEPP.

Funding amounts in Table 1 represent combined totals for direct award funds and some direct contract costs managed by FEMA on behalf of CSEPP States and the CTUIR. (These amounts do not include indirect costs such as FEMA operating expenses and indirect contract costs.) Direct award funds represent amounts sent directly to States and the CTUIR via FEMA CAs and one U.S. Army CA sent directly to the CTUIR in FY 2002. FEMA-managed contracts include those contracts awarded to the U.S. Army Corps of Engineers (USACE) for collective protection projects in the communities. These funds represent a combination of actual expenditures and funds remaining to expend.

Table 1: CSEPP Offsite Funds (Includes Direct Awards and FEMA-Managed Contracts)

State/Tribe	FY 2019	FY 1989–2018
Alabama	\$0	\$399,331,706
Arkansas	\$0	\$117,540,263
Colorado	\$8,267,472	\$111,693,274
Illinois	\$0	\$12,013,873
Indiana	\$0	\$56,215,923
Kentucky	\$22,488,881	\$319,229,788
Maryland	\$0	\$31,220,631
Oregon	\$0	\$161,203,624
Utah	\$0	\$123,761,112
Washington	\$0	\$77,141,706
CTUIR	\$0	\$6,606,173
Totals	\$30,756,353	\$1,415,958,073

The CSEPP Environment

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

Programmatic Factors

Effective risk analysis and planning require strong and continuous commitment from States and individual communities. To present and defend their annually updated lifecycle cost estimates (LCCs), those 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

The program must evaluate, update, and maintain emergency preparedness and response capabilities 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. FEMA will continue to work with its CSEPP partners to weigh the overall cost and benefits of replacing current technology to ensure prudent stewardship of taxpayer funds.

CSEPP conducts cost-benefit analyses for upgrades, replacements, and maintenance to ensure operational readiness, including providing engineering support to evaluate the replacement of interoperable communication systems that includes the possibility of regional approaches to providing communications infrastructure.

Collaborative Factors

A number of other Federal agencies (both within and outside DHS) and nongovernmental organizations support the partnership between FEMA and the U.S. Army. This ongoing effort provides two immediate benefits: technical assistance in response to specific programmatic challenges (e.g., inclusion of the Pueblo Behavioral Health Response Team in CSEPP exercises) and technical support for specific local response and recovery capabilities (e.g., inclusion of Eastern Kentucky University American Sign Language instructors to provide news conference support). CSEPP has also continued its partnership with the DHS Office for Civil Rights and Civil Liberties to ensure the program complies with current statutes and FEMA policy and serves those with disabilities, others with access and functional needs, and LEP populations.

In addition, as relevant national doctrine is issued or revised, CSEPP works with its State, county, and local partners to implement such policies in alignment with their overall emergency management approach. Previously, this included the National Preparedness System and the core capabilities, the National Incident Management System Refresh, and the Oil/Chemical Incident Annex for the Federal Interagency Operational Plan—Response and Recovery. In 2019, this effort encompassed the introduction of Community Lifelines⁶ as a framework for aiding communities in incident stabilization. .

Regulatory Factors

Adherence to the uniform Federal grant rules published by the Office of Management and Budget defines the regulatory structure under which CSEPP awards and manages CA funds.⁷ The respective grants management roles of Federal and State CSEPP officials is a critical component of the partnership between FEMA, Kentucky Emergency Management (KYEM), and the Colorado Division of Homeland Security and Emergency Management. Each State continues to strengthen its oversight authority as the “pass-through entity” for these Federal funds. The States’ commitment to sustainment of quality grants management practices is evidenced by their training programs at the recipient and sub-recipient 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 citizens, emergency management practitioners, organizational and community leaders, tribal officials, 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 endeavored to be inclusive of the whole community and to support the diversity of organizations and populations in the communities the program serves. For example, as part of the program’s efforts to address and involve LEP individuals, requirements under Title VI of the Civil Rights Act of 1964 are specifically reflected in CSEPP’s functional guidance on community planning and public affairs. The Colorado and Kentucky CSEPP communities include LEP populations, most notably Spanish-language speakers. U.S. Census data and information contained in emergency planning studies estimate the LEP community in the Pueblo CSEPP emergency planning zone (EPZ) to be 294 individuals (3.2 percent of the nighttime population) and the LEP community in the Blue Grass CSEPP EPZ to

⁶ <https://www.fema.gov/media-library/assets/documents/177222>

⁷ 2 CFR Part 200, Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards: <https://www.ecfr.gov/cgi-bin/text-idx?SID=6bb67f6254dbbfb229adddfa247ca4eb&mc=true&node=pt2.1.200&rgn=div5>.

be 1,290 individuals (1.1 percent of the nighttime population). The program provides technical assistance, grant funds, and training. Specific examples of efforts to support the LEP community are given throughout this report.

CSEPP also addresses efforts to accommodate individuals with disabilities and others with access and functional needs in accordance with Section 504 of the Rehabilitation Act of 1973.⁸ This includes working with facilities that host such populations (e.g., schools, preschools and daycare centers, nursing homes, and hospitals) and providing for individuals with access and functional needs who are living independently. CSEPP Program Guidance⁹ provides detailed guidance for ensuring the preparedness of these individuals.

CSEPP uses IPTs¹⁰ to 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.

IPTs that include Colorado and Kentucky CSEPP partners provide input to develop programmatic policy. These groups forward their recommendations to FEMA and U.S. Army CSEPP program management for consideration. IPTs have developed specific guidance documents that have been approved by program leaders. Since working groups of stakeholders developed these documents, concurrence was achieved long before the guidance was approved and officially implemented. The Pueblo and Blue Grass CSEPP communities each have their own IPT and sub-IPTs. In addition, there are national IPTs that correlate with specific CSEPP benchmarks. (See Table 2 for a complete list of working groups.)

Table 2: Current CSEPP Working Groups

Functional Working Groups	Community Working Groups	
<ul style="list-style-type: none"> ▪ Automation Integrated Process Team ▪ Exercise Work Group ▪ Medical Work Group ▪ Public Affairs Integrated Process Team ▪ Integrated Public Alert and Warning System Work Group 	<p>Pueblo Community</p> <ul style="list-style-type: none"> ▪ Exercise Planning Team ▪ Public Affairs Work Group ▪ Closeout Planning Work Group ▪ CR/CL/AFN Advisory Group 	<p>Blue Grass Community</p> <ul style="list-style-type: none"> ▪ Public Affairs Working Group ▪ Plans Working Group ▪ Exercise Planning Team ▪ Sheltering Working Group ▪ In-Process Review Team ▪ Closeout Planning Work Group ▪ Medical Advisory Panel

⁸ Section 504 of the Rehabilitation Act of 1973, PL. No. 93-112, 29 U.S.C. § 701 et seq.

⁹ *Chemical Stockpile Emergency Preparedness Program Guidance*, March 2019, p. 58

¹⁰ Public Law 104-201 (National Defense Authorization Act for FY 1997) and implemented under a U.S. Army/FEMA Joint Memorandum for Record—"Use of Integrated Process Teams (IPTs)" (May 1998).

IV. Results

CSEPP Management System

CSEPP's whole community approach brings together onsite and offsite preparedness and thus encompasses a range of core capabilities necessary to prevent, protect against, mitigate against, respond to, and recover from an accident or incident occurring at a U.S. chemical weapons stockpile site. CSEPP focuses on providing the resources necessary to establish preparedness and response infrastructures that enable State and local emergency managers to warn the public quickly, manage the response, and communicate with emergency responders and other members of the whole community. A key CSEPP management principle is the concept of "functional equivalency," whereby specific resources are provided to each site to address gaps and enhance existing capabilities under the 12 programmatic benchmarks defined by CSEPP (discussed below). FEMA also maintains effective program management at the headquarters and regional levels to ensure consistent capabilities throughout all CSEPP jurisdictions.

CSEPP completed a community-wide review and update to its Program Guidebook and Exercise Implementation Guidance. These two keystone documents describe program administration and implementation and guide the CSEPP exercise-development and execution process. Both of these documents align to current national, U.S. Army, and FEMA policies, including the National Preparedness Goal, NIMS, and HSEEP.

FEMA has a fiduciary responsibility to carefully evaluate and validate requests from States and counties for delivering necessary resources to local communities facing the most significant potential threats. This is conducted through an open and continuous system of planning, programming, budgeting, and execution described above that is rooted in DOD acquisition policy. As an example, FEMA strives to ensure cost-efficiency in procurement and interoperability among major systems that benefit multiple jurisdictions, which, in many cases, means State-level procurement of alert and notification, communications, and automation systems.

Since CSEPP funding ends after DOD successfully completes its disposal mission, CSEPP communities must plan for the long-term sustainability of equipment and processes that are put in place during the program. FEMA assisted the CSEPP community with program management initiatives that involve the sustainability planning of systems, equipment, and capabilities. CSEPP communities have installed and maintained specific public-safety systems for operational capabilities. The Colorado and Kentucky CSEPP communities now focus on measures to determine future disposition of the systems or to build planning measures to sustain operational functionality of those systems and equipment after CSEPP. The 2019 CSEPP Strategic Plan includes closeout as one of two strategic goals (preparedness until completion of demilitarization being the other) and provides the prioritization and direction for programmatic closeout. The CSEPP community and program closeout are regular topics for program management and

community meetings and will be reported using a framework that addresses people, property/equipment, plans/procedures, funding, and automation/communications/warning systems.

Risk Reduction

Chemical stockpile destruction continues at PCD in Colorado and BGAD in Kentucky. Until stockpile destruction is complete, CMA continues to safely secure, monitor, and store the chemical weapons stockpiles.

To support risk reduction in the communities near the stockpiles, the CMA on-post mission continued to maintain emergency preparedness and readiness, demonstrating this capability during the joint annual CSEPP exercises with the Pueblo community on May 8, 2019 and with the Blue Grass community on September 18, 2019.

CSEPP will continue to support sustainment and maintain state-of-the-art response capabilities for both the depots and the surrounding communities until the chemical weapons stockpiles are eliminated.

CSEPP Benchmarks

The CSEPP Strategic Plan and accompanying program guidance describe 12 performance benchmarks “used by Federal, State, and local government organizations to identify the CSEPP capabilities being funded ... [and to report] the status of CSEPP to Congress in required annual reports.” Under the CSEPP CA, States are required to report expenditures and performance on a quarterly basis using these benchmarks. These benchmarks apply across the program and are reflected in CSEPP’s strategic plan, guidance, LCCEs, annual budgets, and employee work plans.

These program benchmarks are integrated with the National Preparedness Goal’s 32 core capabilities and support the 3 strategic goals of the FEMA Strategic Plan to “create a culture of preparedness; ready the Nation for catastrophic disasters; and reduce the complexity of FEMA. The benchmarks further contribute to accomplishing FEMA’s mission of helping people before, during, and after disasters.”

The alignment of program benchmarks to national and FEMA plans and policy—and specific program activities that support these benchmarks—ensure consistency of effort between CSEPP and other DHS/FEMA preparedness programs (see Figure 3). As part of its efforts in Colorado and Kentucky, CSEPP has enhanced planning, organization, equipment, training, and exercises in many of these areas.



Figure 3: Alignment of CSEPP Benchmarks to Core Capabilities

Table 3 below illustrates generally how the core capabilities relate to the five National Preparedness Goal mission areas, highlighting in blue those capabilities that are a particular focus for the offsite community in CSEPP. CSEPP efforts have most markedly improved State and local capabilities under the Response mission area: planning, operational coordination, operational communications, situational assessment, and public information and warning. Separate U.S. Army actions have further developed capabilities within the Prevention and Protection mission areas, in particular through physical protective measures and risk management.

Table 3: Core Capabilities by Mission Area

Prevention		Protection	Mitigation	Response	Recovery
Planning					
Public Information and Warning					
Operational Coordination					
Intelligence and Information Sharing		Community Resilience Long-term Vulnerability Reduction Risk and Disaster Resilience Assessment Threats and Hazards Identification	Infrastructure Systems		
Interdiction and Disruption			Critical Transportation	Economic Recovery	
Screening, Search, and Detection			Environmental Response/Health and Safety	Health and Social Services	
Forensics and Attribution	Access Control and Identity Verification Cybersecurity Physical Protective Measures Risk Management for Protection Programs and Activities Supply Chain Integrity and Security		Fatality Management Services Fire Management and Suppression Logistics and Supply Chain Management Mass Care Services Mass Search and Rescue Operations On-scene Security, Protection, and Law Enforcement Operational Communications Public Health, Healthcare, and Emergency Medical Services Situational Assessment	Housing Natural and Cultural Resources	

CSEPP also works to support its partners at the State and local levels as they integrate the use of core capabilities into their preparedness systems generally. Based on discussions with Colorado and Kentucky in 2018, efforts are currently underway that are intended to smooth the transition of exercise and grants management activities from CSEPP preparedness funding at the end of the program.

The communities assess themselves by benchmark as measured against performance indicators defined in the CSEPP Strategic Plan. These assessments inform the analysis and assessment conducted at the State level and become part of the THIRA process and the annual State Preparedness Review (SPR).

CSEPP's 12 benchmarks, performance indicators for each benchmark, and a summary of how the benchmarks were achieved during the fiscal year are as follows:

Benchmark: Administrative support for each CSEPP installation, State, and county necessary to support their CSEPP preparedness activities.

Performance Indicators: The ability of onsite and offsite communities to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Timely programming and budgeting actions and the release of annual funding to the grantees addressing all validated requirements.

FY 2019 Performance Outcomes: CA recipients participated in the programmatic and financial monitoring requirements necessary for FEMA to validate budget requirements and award the CAs. The Colorado and Kentucky CSEPP communities achieved the administrative benchmark through a self-assessment of year-long achievements documented in the Community Profile, which included considerations and details toward program closeout.

Benchmark: Functioning alert and notification system extending across the installation and appropriate offsite jurisdictions to communicate protective actions and other critical response information to the public.

Performance Indicators: Results of regular system testing and the frequency and duration of service interruptions. Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Performance at the annual CSEPP and quarterly Chemical Accident or Incident Response and Assistance (CAIRA) exercises and real-world emergency situations.

FY 2019 Performance Outcomes: FEMA CSEPP engineering teams validated alert and notification system requirements and provided onsite observation of system renovation and upgrades to ensure design specifications were met by contractors and vendors. Both Colorado and Kentucky Community IPTs affirmed benchmark compliance in the Community Profile. Both communities tracked specific outcomes during the year, including ongoing IPAWS testing with the Joint Interoperability Test Command and successful transmission of actual emergency alerts in Madison County, KY using IPAWS messages. Pueblo, CO has upgraded its outdoor warning system to address challenges due to the age of the equipment and the lack of availability of replacement parts. This project replaced existing sirens, utility poles, and control equipment and added two new siren locations to enhance coverage at PCD. The decommissioning of old sirens is in progress. Both communities maintained operability and maintenance records, regularly tested their systems, and began preparations toward program closeout.

Benchmark: Functioning automation system for the rapid exchange of chemical hazard modeling and protective action analysis between the CSEPP installation, State, and counties.

Performance Indicators: Results of regular system testing and the frequency and duration of service interruptions. Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Performance at the annual CSEPP exercise and, as applicable, quarterly CAIRA exercises and real-world emergency situations.

FY 2019 Performance Outcomes: CSEPP partners regularly tested warning systems during drills and exercises and used those systems daily as part of routine (non-emergency) operations. If system interruptions and problems were identified, corrective actions or funding for replacements were provided. System owners maintained operability and maintenance records. The U.S. Army successfully transmitted daily work plans to community partners using CSEPP Automation Systems. Both communities affirmed automation systems benchmark compliance in their Community Profiles and began preparations toward program closeout.

The Pueblo County Sheriff's Office, Emergency Services Bureau (PCSOESB) successfully demonstrated their IPAWS capabilities by conducting an out-of-sequence exercise to notify the community of a simulated railroad incident. PCSOESB also uses IPAWS for public warning and will soon start monthly testing of that system in accordance with new IPAWS regulations. Madison County, KY also tested their IPAWS during the annual CSEPP exercise and sent at least one actual IPAWS message during the year.

Benchmark: Functioning communications links among CSEPP installation, State, and county emergency operations centers (EOCs) and the joint information center (JIC) to support the coordinated implementation of response plans.

Performance Indicators: Results of regular system testing and the frequency and duration of service interruptions. Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Performance at the annual CSEPP exercise and, as applicable, quarterly CAIRA exercises and real-world emergency situations.

FY 2019 Performance Outcomes: During FY 2019, both CSEPP communities used communications systems for emergency and non-emergency events. FEMA provided engineering support (both government engineers and specialty contractors) to validate communication system requirements. Both communities use their CSEPP communications systems for routine (non-emergency) operations, and all identified problems were promptly corrected. Operability and maintenance records during routine public safety radio and dispatch operations were maintained and preparations began toward program closeout.

Benchmark: Coordinated plans for response to hazards from the stockpile for each CSEPP installation, State, and county.

Performance Indicators: Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Performance at the annual CSEPP exercise and, as applicable, quarterly CAIRA exercises and real-world emergency situations.

FY 2019 Performance Outcomes: FEMA provided technical assistance (both government employees and contractors) to assist CSEPP partners in updating emergency plans. FEMA maintained an online planning template tool to assist with the development of emergency plans. FEMA evaluators reviewed coordinated plans annually during exercises, and jurisdictions tested plans during annual drills and exercises. Community Profiles affirmed coordinated plans and preparations began toward program closeout.

Benchmark: Functioning EOCs at each CSEPP installation, State, and county to support the coordinated implementation of response plans.

Performance Indicators: Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Performance at the annual CSEPP exercise and, as applicable, quarterly CAIRA exercises and real-world emergency situations.

FY 2019 Performance Outcomes: EOC requirements were validated by FEMA-provided engineering support (both government engineers and specialty contractors), including providing oversight of equipment and systems installation in new or renovated EOCs to ensure contractors and vendors met specifications. FEMA supported the completion of punch lists and the acceptance of new and/or renovated facilities to ensure operational readiness.

EOCs were activated for non-CSEPP emergencies, including wildfires, severe weather, and large community events. After each activation, EOC procedures were reviewed and revisions to procedures were made. Jurisdictions tested EOC procedures during annual exercises and drills and affirmed EOC functionality in the Community Profile. Jurisdictions also maintained operability and maintenance records during routine operations, and preparations began toward program closeout.

Benchmark: An exercise program that effectively tests integrated response capabilities and preparedness.

Performance Indicators: Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Annual CSEPP exercise, after-action report, and corrective action plan executed in accordance with the Program Guidebook and Exercise Implementation Guidance.

FY 2019 Performance Outcomes: CSEPP partners successfully completed two full-scale annual exercises and numerous CAIRA exercises in FY 2019. FEMA and the U.S. Army reviewed exercise performance immediately following the annual exercise with participating partners. FEMA prepared and published after-action reports on schedule and communicated those to program partners. Jurisdictions completed corrective action plans that they used during the next exercise planning cycle. Communities also conducted detailed improvement planning and began preparations toward program closeout. For example, additional training on procedures for properly donning and doffing personal protective clothing was held after an exercise, resulting in some discrepancies on proper procedures.

Benchmark: A medical program to support on-post and off-post medical preparedness among first responder and receiver organizations for a chemical weapons accident or incident.

Performance Indicators: Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Performance at the annual CSEPP exercise and, as applicable, quarterly CAIRA exercises and real-world emergency situations.

FY 2019 Performance Outcomes: Both pre-hospital and hospital personnel participated in annual drills and exercises where the medical treatment of simulated casualties from a potential chemical agent was demonstrated to FEMA evaluators. Hospitals and pre-hospital emergency medical services (EMS) providers maintained medical response and treatment materials during the year and began preparations toward program closeout.

Benchmark: Specialized personnel, such as a CSEPP manager, public information officer (PIO), planner, and information technology specialist, to support CSEPP activities at CSEPP installations, States, and counties.

Performance Indicator: Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Performance reports for jurisdiction personnel (derived from annual work plans) completed and submitted within the established frequency required for program monitoring.

FY 2019 Performance Outcomes: CSEPP partners maintained staffing plans throughout the year. FEMA reviewed personnel staffing requirements during budget discussions and began preparations toward program closeout. Jurisdictions affirmed staffing requirements in Community Profiles. Evaluators observed the adequacy of staffing for emergency operations during drills, exercises, and real-world emergency responses. Timely completion of program requirements, including budgets, LCCEs, and quarterly reports, demonstrated that administrative staffing was sufficient to support program requirements.

Benchmark: Protective action strategy for each jurisdiction that is based on the threat from the stockpile, consistent with response plans, and conforms to established CSEPP guidance.

Performance Indicator: Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Performance at the annual CSEPP exercise and, as applicable, quarterly CAIRA exercises and real-world emergency situations.

FY 2019 Performance Outcomes: CSEPP partners reviewed and updated chemical stockpile risk and made appropriate changes to protective action strategies during the year. Madison County developed a new protective actions decision matrix based on the type of agent involved in a chemical accident or incident. This allows for a more precise approach to determining community protective actions and leverages risk assessment results. The USACE ensured proper maintenance of collective protection systems through maintenance logs and on-scene inspections. Preparations began toward program closeout.

Collective protection involves identifying facilities with more vulnerable populations (e.g., schools and nursing homes) and installing additional measures to protect their inhabitants. The specific collective protection measures are chosen using a risk-based approach in cooperation with the community. At the Blue Grass site, facilities are outfitted with the necessary structural and mechanical enhancements to provide protection in case of a chemical agent event. These enhancements may include measures to reduce air exchange (and thus chemical agent infiltration) or over-pressurization using chemical agent filtration systems.

Benchmark: A program for coordinated emergency public information and education, including a public outreach/education program to enhance CSEPP awareness and familiarity with the protective action strategy.

Performance Indicator: Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Performance at the annual CSEPP exercise and, as applicable, quarterly CAIRA exercises and real-world emergency situations. Ongoing assessments of community awareness of

CSEPP, the nature and risks associated with the chemical stockpile, how to obtain emergency information, and potential actions to take in a chemical emergency.

FY 2019 Performance Outcomes: CSEPP-funded PIOs remained staffed during the fiscal year. IPTs and work groups both at the community and programmatic levels functioned during the fiscal year. Jurisdictions demonstrated emergency public information capabilities in both annual exercises. During the fiscal year, emergency public information systems were used for community emergencies, and CSEPP PIOs communicated resultant lessons learned to program partners. Each community implemented public education programs and began preparations toward program closeout.

Benchmark: Training programs, consistent with CSEPP guidance, State and local training plans (for off-post jurisdiction personnel), and U.S. Army certification requirements (for installation personnel) that maintain proficiency of emergency services providers/responders and CSEPP staff.

Performance Indicators: Each State's and installation's ability to meet and sustain full compliance to this benchmark's standards, as measured by the Community Profile process. Availability and quality of training materials for installation, State, and county responders.

FY 2019 Performance Outcomes: Jurisdictions identified training requirements and program partners and addressed them during the fiscal year through training delivery or assistance locating existing training opportunities. Federal, State, and local training providers recorded attendance, and students evaluated the volume and quality of training offered as feedback to providers. FEMA observed and evaluated personnel skills during annual drills and exercises. Training providers awarded continuing education credits where applicable. Preparations began toward program closeout.

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

- FEMA leads each community IPT in updates of a community profile describing the status of each community benchmark quantitatively (e.g., number of sirens and message reader boards installed) and qualitatively (e.g., sufficiency of resources to support a capability). The profile enables Federal, State, and local partners to assess the CSEPP community's deficiencies in preparedness, gauge activities toward reaching benchmark success, address challenges through remedial action, and track milestones toward program closeout.
- FEMA and the U.S. Army jointly direct an annual community exercise (including a review of plans and training) in accordance with HSEEP. Within 90 days of the exercise, the exercise co-directors finalize an after-action report 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 reviews the SPR required under the Post-Katrina Emergency Management Reform Act of 2006 to track specific improvements in core capabilities and identify potential areas for collaboration and improvement as part of ongoing discussions with its State and local partners.
- FEMA considers the results of jurisdictional equipment maintenance and testing programs as well as lessons learned from all-hazards community disaster response.

Colorado and Kentucky CSEPP communities report full compliance for each benchmark in FY 2019. As the program has continued and basic capabilities have been met, community preparedness and jurisdictional resilience has increased. Through self-assessment, a community may decide to focus on a specific area toward building capability in a given benchmark. For example, a community may determine that its Coordinated Plans need to be updated to reflect demographic changes and address diverse population planning. This demonstrates how a community would take its own recognized opportunity and self-determine how to best meet its own needs for full compliance.

A summary of significant activities in the next section discusses each benchmark from a programmatic level.

V. Summary of Significant Activities

Programmatic activities in FY 2019 that support the 12 CSEPP benchmarks are as follows.

Administration



CSEPP's breadth and complexity require a measured, cooperative, and inclusive administration of budgetary, contractual, logistical, and management challenges across Federal, State, tribal, and local levels to ensure success. These administrative activities include:

- 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 FY 2020 work plans with Colorado and Kentucky that maintain and enhance emergency preparedness based upon chemical stockpile risks;
- Providing staff and contractor support to programmatic and community IPTs and work groups to address technical challenges that arise; and
- Providing programmatic oversight in accordance with the U.S. Army/FEMA MOU.

Cost Estimation Reassessment and Revalidation

As a DOD-funded program, CSEPP maintains a comprehensive LCCE to estimate every potential cost of the program for the life of the program. In FY 2019, in conjunction with a U.S. Army-wide Environmental and Disposal Liability re-assessment, CSEPP conducted a comprehensive revalidation of cost estimates. FEMA, State, and local CSEPP personnel ensured that all cost estimates were valid, developed using accepted and proper methods, and accompanied by sufficient documentation to ensure audit-readiness at every level of the program. This effort helped ensure that CSEPP estimates for the future remain realistic and fiscally responsible.

CSEPPWebCA

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

CSEPPWebCA automates preparation and submission of CA applications and allows staff at FEMA Regional offices 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. CSEPPWebCA automates quarterly performance and financial reporting and 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 unliquidated balance to zero.

As noted, grantees at six sites have closed out their CSEPP awards. As part of the closeout process, grant managers use the CSEPPWebCA 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.

A FY 2019 review from FAPO identified opportunities to improve recipient reporting in CSEPPWebCA. CSEPP maintained the CSEPPWebCA Authority to Operate (ATO) by applying security controls as documented in the CSEPPWebCA Security Plan. As required annually, all 18 control families in the plan were reviewed and updated, and a tabletop exercise was conducted to assess the Contingency Plan. These activities are performed to keep the system secure and in preparation for the ATO renewal process in 2020. CSEPPWebCA will be maintained until all CSEPP sites are closed.

Team Meetings

In July/August 2019, CSEPP convened a Teams Meeting in Richmond, KY at the Madison County Emergency Management complex. The purpose of the meeting was to coordinate and facilitate interaction between different activities with a focus on the core capabilities. On the first day and the morning of the second day, the Program Management Team, composed of senior FEMA, U.S. Army, State, and county CSEPP managers, met to review progress, discuss program initiatives and issues, and plan activities for the coming year. Discussion during the afternoon of the second day focused on lessons learned and professional development. On the third day, the four program work groups and IPTs (Public Affairs, Automation, Exercise, and Medical) met in individual and joint breakout sessions. Participants were enthusiastic about the meeting's effectiveness in sharing information and identifying areas to improve outcomes through direct coordination of group activities.

Throughout the rest of the year, CSEPP held a range of other operational meetings for each of the communities and the IPTs and work groups, as well as budget discussions, training, and sessions with subject-matter experts. An earlier Program Management Team meeting of Army, FEMA, and Colorado and Kentucky CSEPP stakeholders in January ensured the interests of all CSEPP jurisdictions were programmatically addressed as the year began.

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 (alert) and providing information concerning appropriate protective actions (notification).

CSEPP alert and notification consists of a network of outdoor and indoor alerting devices in residential dwellings and special facilities that serve populated areas of the IRZs. Examples of outdoor alerting devices include public address-capable sirens and electronic digital roadway signs. An example of an indoor alerting device is a tone alert radio. CSEPP also provides digital telephone, email, and short message service (SMS) text messaging as part of its emergency notification system. These systems use a combination of landline subscriber telephone information and public registration to transmit messages. Several CSEPP communities have begun to integrate IPAWS into their regular alert and notification capabilities. The CSEPP IPAWS work group provides answers to questions and guidance as needed. CSEPP-provided alert and notification systems may 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 proper design and maintenance of CSEPP alert and notification systems.

Outreach to and the notification and protection of persons with disabilities and others with access and functional needs, including LEP individuals, have been CSEPP priorities for many years. Tone alert radios and weather alert radios, used to warn residents of any emergencies (including chemical accidents), can support an audible tone and flashing lights that illuminate when activated. These features alert persons with visual and hearing impairments to an emergency. In addition, systems are available for residents to receive voice and text messaging in the event of an emergency. Each CSEPP State also has Spanish-language translators and interpreters in its JIC to assist in communicating emergency instructions to persons with LEP. Additionally, sign-language interpretation is available at the JIC in Kentucky. These capabilities are tested during annual exercises.

Automation



WebPuff™

WebPuff, a web-based system built around the DOD-accredited D2-Puff™ atmospheric dispersion model, enables the automated sharing of essential hazard information between U.S. Army and offsite EOCs. WebPuff has undergone DOD Risk Management Framework accreditation as required under the DOD information assurance initiative and has been granted an ATO. In an emergency, WebPuff serves as a key response

coordination tool, as demonstrated during regular community exercises. It exports CSEPP information in a format compliant with common alerting protocol (CAP) standards for information exchange. This allows States and counties to use 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. A WebPuff Configuration Control Board, with representatives from the U.S. Army and CSEPP communities, is responsible for approving changes to the functional components of WebPuff to ensure the software continues to meet the needs of end-users effectively.

CSEPP Portal

The [CSEPP Portal](https://www.cseppportal.net/SitePages/index.html)¹¹ 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 Federal program guidance, presentations from stakeholder meetings, site event calendars, and links to partner websites. The Portal also provides a platform for the CSEPP communities, IPTs, exercise participants, and working groups to collaborate remotely on preparedness projects. The public-facing pages of the Portal make the program's technical video training library available to a broader audience. Stakeholder feedback drives updates to Portal functions to ensure the tool meets the needs of the more than 1,000 registered users from CSEPP partner organizations.

In FY 2019, CSEPP continued efforts to enhance the security of the CSEPP Portal by tightening policies and practices and implementing additional DHS/FEMA measures required to protect against ever-changing cyber threats. CSEPP also automated time-consuming tasks, improving the user experience and gaining efficiencies in system administration. CSEPP conducted an in-depth study of options for migrating applications to FedRAMP-certified cloud services, which would reduce overhead and provide more robust disaster recovery and continuity of operations (COOP) functions

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 critical State and local response organizations, including EMS, fire, police, hospital, and public works. FEMA provides engineering support to assist the communities in maintaining interoperable communications.

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

¹¹ <https://www.cseppportal.net/SitePages/index.html>

Coordinated Plans



CSEPP emergency plans are developed to capture the most effective protective action strategies and procedures for each CSEPP community. CSEPP plans are regularly updated based upon the latest guidance regarding the National Preparedness System, NIMS, and ICS and are coordinated across the depots and offsite communities. FEMA provides ongoing technical support for planning projects in Colorado and Kentucky, including regular revisions to State and county plans and the maintenance of planning toolkit software that supports coordination and compliance with national planning standards. During FY 2019, FEMA supported the development of a Sampling and Analysis Plan for the Kentucky CSEPP community, a comprehensive review of Kentucky CSEPP community incident-specific plans, and continued refinement of the public-protection decision tree tool for Madison County. FEMA also supported continued program closeout planning for Colorado and initiation of closeout planning in Kentucky to ensure a smooth transition to a post-CSEPP environment following the end of the program. Details on planning efforts in Colorado and Kentucky are provided in Appendices A and B.

Emergency Operations Planning Template

CSEPP developed the Emergency Operations Planning Template (EOPT) to support State, local, and tribal jurisdictions in aligning their specialized chemical emergency response plans with NIMS and integrating them into their all-hazards operations plans. The tool is currently in use in 13 States (including Kentucky), with a user base that includes 6 tribal nations, 93 counties, 23 cities, 3 military installations, and more than 48 other organizations. In addition, the Idaho Department of Health and Welfare has adopted the tool for use in developing its State and local COOP plans. The EOPT is also in use in CSEPP's sister program, the Radiological Emergency Preparedness Program (REPP), to help participating jurisdictions simplify and update their radiological emergency response plans and mesh them with all-hazards plans. Currently, the States of Kansas, Louisiana, and Iowa, in cooperation with the REPP Program Office, are using EOPT to develop and deploy radiological emergency response plans for local jurisdictions.

CSEPP is currently working with the Commonwealth of Kentucky using EOPT to prepare updated CSEPP Incident-Specific Plans for the 10 Kentucky counties in the program. The plans will be formatted according to a new plan outline adopted earlier in 2018 by KYEM's Operations and Planning Branch. CSEPP is developing a corresponding plan review tool (based on FEMA and CSEPP guidance) to ensure that public safety objectives are met during the plan re-writing process.

The tool has found use in other settings, including the following, demonstrating its flexibility:

- Six colleges and universities;
- One State floodplain management program;
- Seven public school districts (emergency operations plans [EOPs]); and

- Two State health departments and six regional public health agencies.

Emergency Operations Centers



An EOC serves as the central location for emergency management. In these facilities, various response organizations come together to plan and implement emergency response. CSEPP, with local and State contributions, helps fund EOCs, ensuring that communities have the necessary facilities to manage an emergency response. During FY 2019, planning for renovations to the Estill County, KY EOC continued. EOC project details can be found in Appendices A and B.

Exercises



A robust exercise program is critical to building, evaluating, and sustaining the planning, training, and operation of an emergency management program. Annual CSEPP exercises are planned and executed by the U.S. Army and FEMA and jointly managed by U.S. Army and FEMA Regional co-directors. These exercises ensure onsite and offsite responses are properly coordinated across all response partners.

During FY 2019, teams of Federal, State, and local personnel evaluated the full-scale CSEPP exercises in Pueblo on May 8, 2019 and Blue Grass on September 18, 2019. FEMA and the U.S. Army distributed final after-action reports recommending corrective actions across the program within 90 days of the exercise. Over the last 24 years at the 8 sites, reports have been prepared on more than 100 full-scale community exercises, including tabletop exercises and workshops examining community-wide and jurisdiction-specific practices. 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 (JIS).

With social media becoming increasingly important in emergency management, robust social media play has become a regular feature of CSEPP exercises. At both sites, a restricted digital environment that keeps exercise communications secure displays controller-injected content, enabling emergency management officials to demonstrate a broader range of capabilities than would be possible with just telephone calls. These simulated interactions with the public and media allow participants to test their social media plans and procedures to identify what works well and what improvements may be necessary in an ever-changing medium.

In Kentucky, several school and shelter exercises were conducted “out of sequence” or prior to regularly scheduled annual exercise dates. These exercises were evaluated by FEMA, and the results were incorporated into the exercise after-action report.

In addition to these annual full-scale exercises, CSEPP jurisdictions participated in the U.S. Army’s quarterly chemical accident/incident response exercises. Throughout the year, county

emergency managers also held all-hazards or other hazard-specific tabletop and functional exercises.

CSEPP exercise guidance emphasizes the benefits of a jointly managed U.S. Army/FEMA exercise program and provides a specific roadmap for planning, execution, evaluation, and assessment of CSEPP exercises. The [CSEPP Exercise Implementation Guidance](#)¹² maintains consistency with HSEEP. Since many HSEEP precepts are already a part of CSEPP, the two communities have experienced little difficulty in adopting HSEEP methodologies. CSEPP also revised the Exercise Implementation Guide to reflect updated HSEEP guidance and FEMA policy.

CSEPP policy emphasizes using peer evaluators during exercises. This initiative encourages emergency managers and first responders from other jurisdictions to assist in exercise evaluations; more than two dozen individuals took advantage of this opportunity during the two exercises in FY 2019. This approach broadens the knowledge base of evaluators and serves as a method of sharing best practices among the participants.

Medical Program



In FY 2019, CSEPP communities maintained and enhanced their capabilities to treat potential victims of a chemical agent release from a U.S. Army chemical weapons facility. The active participation of public and private hospitals, State and local health departments, and emergency services organizations in the program enables this level of medical readiness.

The U.S. Army Public Health Center (PHC) and FEMA provide Federal technical support to these communities. CSEPP offers several critical resources:

- Training on personal protective equipment (PPE), chemical agent hazards, decontamination, treatment of patients, hospital incident command, and healthcare facility evacuation, with nearly 300 students from EMS and hospitals in Colorado and Kentucky attending a range of medical training sessions during FY 2019;
- Agent-specific pharmaceuticals and PPE for participating organizations; and
- Enhancements to the safety and capabilities of hospital facilities.

In addition, involvement in the annual CSEPP exercise supports hospitals in maintaining their accreditation. In FY 2019, 12 hospitals, onsite health clinics, and long-term care facilities validated their capabilities during the annual exercises. A team of health and medical professionals, both program staff and contractors, were available to evaluate their performance. More details on these activities are provided in Appendices A and B.

¹² <https://www.fema.gov/media-library/assets/documents/20604>

Personnel



Federal, State, county, and local response capabilities must be maintained with a team of qualified professionals. Experienced people are essential for overseeing preparedness planning, implementing procedures, and coordinating 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 in coordination with U.S. Army management to ensure program needs were met. In addition, FEMA provided training to ensure personnel have the knowledge necessary to carry out their mission. Building the capacity of program personnel continues to be a CSEPP priority.

Recent personnel additions to fill CSEPP Headquarters and Region IV vacancies maintained the ability to assist State and local partners. Additionally, with the start of stockpile destruction operations in Kentucky, Madison County began 24-hour staffed operations to match the BGCA Army EOC operational periods.

Protective Actions



CSEPP supports a balanced protective action strategy that includes evacuation and sheltering-in-place as part of onsite and offsite hazard-specific plans. These options can be augmented by additional actions for sensitive populations if required. This approach is zone-based because the most effective and appropriate protective action for a specific incident can vary depending upon the distance from the hazard and the time required for a hazard to arrive.

Sheltering-in-Place

To maximize the effectiveness of available protective actions, CSEPP has conducted studies to determine the best way to protect residents during a chemical emergency. Madison County, KY has developed and exercised a series of protective action “decision trees” for credible chemical emergency scenarios. These decision tools are designed to ensure that all potentially affected individuals are protected from the event while minimizing the potential for unnecessary relocation and reducing the impact of reception, decontamination, and mass care operations in host jurisdictions. Quantifying the effectiveness of these protective actions and exercising the decision-making process has placed emergency decision-making on a sound, scientific footing.

Residents of the affected zones receive shelter-in-place kits to enhance shelter rooms and decrease possible infiltration of a chemical 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 training videos to residences and businesses.

Over-Pressurization of Special Facilities

The over-pressurization of special facilities or safe areas, combined with air filtration, is a highly effective method of protecting building inhabitants and is implemented where it demonstrably reduces risk. Under a memorandum of agreement between FEMA and the U.S. Army, the USACE continues to perform specialized maintenance on over-pressurized and enhanced shelter-in-place facilities for specific vulnerable populations near BGAD, including nine additional facilities added in FY 2018. This maintenance includes operating the systems; inspecting the systems to ensure that all components are functioning properly; and performing repairs, preventive maintenance, and annual filter tests.

Emergency Responders

According to CSEPP policy, offsite emergency responders should never enter the chemical threat area identified by the hazard model. As an added precaution, CSEPP continues to provide PPE ensembles (e.g., chemical protective suits, powered air-purifying respirators, gloves, and boots) and associated mandatory training to response personnel, including those who 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. CSEPP also provides protective equipment to emergency workers supporting triage and decontamination operations. To date, more than 5,000 protective equipment ensembles have been provided to protect CSEPP's emergency workers.

Public Outreach and Education



CSEPP public outreach and education is a critical function of a robust emergency management system. CSEPP funds 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. PIOs also teach FEMA local-level public information courses in their communities. CSEPP provided program-specific training throughout the fiscal year in CSEPP 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 the results of CSEPP exercises. In FY 2019, PIOs shared lessons learned and best practices, participated in professional development sessions and continued to explore better methods for reaching the whole community by implementing additional outreach initiatives that were developed in local CRCL plans. The PA IPT has played a pivotal role in developing closeout communications plans. During the fiscal year, the IPT began the planning process for developing closeout communications plans.

“Prepare Pueblo” in Colorado and “Prepare KY” in Kentucky are public education programs with locally maintained websites that provide CSEPP emergency information to residents. CSEPP PIOs strengthen relationships with local stakeholders by engaging the whole community through presentations to schools and civic organizations and by participating in community events. Both sites make CSEPP outreach materials available in Spanish and English, and Spanish interpreters are available for outreach events and program meetings. Specific details on outreach initiatives in the two communities are located in Appendices A and B.

Training



During FY 2019, CSEPP conducted classroom training at the State and local levels for participants from the CSEPP communities and personnel from other Federal, State, and local agencies involved in homeland security. CSEPP stakeholder and programmatic IPTs and work groups assess training needs and provide feedback to program managers on future course content. CSEPP training is shared with many other communities across the United States through social media and websites.

CSEPP continues to sponsor first-responder and first-receiver training where continuing education units or continuing medical education units were awarded to those who successfully completed the training. CSEPP facilitated the delivery of the Emergency Management Institute (EMI) Master Exercise Practitioner Program (MEPP) training in both Kentucky and Colorado. This training will benefit program exercise planning and execution as well as a post-CSEPP exercise capability.

Available CSEPP classroom training courses encompass the following topics:

- CSEPP orientation and chemical awareness;
- Use of antidote auto-injectors by emergency medical personnel;
- Decontamination and use of PPE;
- Emergency medical training;
- CSEPP JIC/JIS;
- CSEPP information and communication technology;
- CSEPP advanced information and communication technology;
- CSEPP spokesperson training; and
- CSEPP photography/video in social media formats.

VI. Looking Forward

Building on the successes and lessons learned from the U.S. Army-FEMA partnership, CSEPP remains committed to ensuring the two remaining communities are fully prepared to respond to an accident involving the chemical weapons stockpile while planning for the eventual program closeout. The joint Army/FEMA CSEPP Strategic Plan for the remaining years of the program is built on these two pillars.

As operations continue at PCD and BGAD, CSEPP partners are focused on protecting the population and sustaining future capability. The counties are replacing and updating warning and communications systems to provide potential lifesaving information to its citizens and responders. Coordinated plans are updated and annual CSEPP exercises continue to validate preparedness and identify areas of improvement. Public outreach and education continue to inform residents on what to do in the event of a chemical emergency and robust training programs continue in both communities. Sustaining the preparedness capabilities will continue until the stockpile is destroyed, ensuring ready and resilient communities with facilities, equipment, and systems to respond to a chemical stockpile incident.

CSEPP is working across the program to be a hallmark of inclusiveness. In partnership with State and local communities, the program is developing plans and processes to engage organizations that represent those with access and functional needs, vulnerable populations, and LEP populations. The program will assess the effectiveness of ongoing outreach efforts. Training will include ways to assure access to program, communication, and services to the whole community. CSEPP will also expand exercises to include greater participation and representation from these community partners.

FEMA, in cooperation with the U.S. Army, will continue to closely align CSEPP efforts with overall State preparedness efforts and implementation of national preparedness doctrine. FEMA continues to review CSEPP community needs in the context of whole community THIRA analysis, leveraging the assistance CSEPP provides under the “maximum protection” mandate to help the CSEPP communities achieve capability targets and maximize the shareable resources available for CSEPP-related or other emergency events.

As closeout planning continues in both communities, FEMA will work with each community to assess their post-CSEPP risks in accordance with national preparedness doctrine and ensure that capabilities provided by CSEPP are sustainable to the greatest possible extent in the post-CSEPP environment. The focus is on gradual progression to a post-CSEPP steady-state of capabilities that ensures the maximum possible continued benefit from the significant national investment made in the CSEPP communities and supports all-hazards community preparedness.

VII. Conclusion

FY 2019 was pivotal for the program with the start of agent operations at BGAD. This milestone highlights the need of both communities to carefully plan for the eventual end of the program while maintaining the preparedness capabilities until the stockpiles are completely destroyed. Over the last fiscal year, CSEPP continued to meet the FEMA strategic goal to build a culture of preparedness in the communities near the two remaining chemical stockpile sites. Working closely with its U.S. Army and State and local partners, FEMA continued to meet its program goals, with notable improvements in coordinated emergency planning, interoperable communications systems, and public alert and notification systems. Although these areas were priorities for the program, existing capabilities under all 12 benchmarks were maintained and, in some cases, enhanced during the fiscal year.

A cornerstone of CSEPP is the sharing of best practices, resources, and expertise among all CSEPP communities. Through the use of IPTs, CSEPP has been able to learn from past experience and continually improve and innovate. IPTs, in the communities and programmatically, remain critical to the successful advancement of CSEPP goals and the resolution of new challenges.

Two successful full-scale exercises demonstrated existing capabilities and assisted in prioritizing capability needs in the coming year. FEMA will continue to follow the planning, programming, budgeting, and execution model for advancing program goals to prepare and enable communities to protect citizens in the unlikely event of a chemical emergency at the Nation's two remaining chemical weapons stockpile sites.

Patient Tracking—CSEPP Challenges Lead To All-Hazards Improvements

The effective tracking of patients sent from the Pueblo Chemical Depot and its clinic to local hospitals, as well as from other locations in Pueblo County, remains a critical capability for supporting a CSEPP response. During 2019, patient tracking was an important aspect of Pueblo County's emergency preparedness and response efforts and will be a point of emphasis during a functional exercise in FY 2020.

In the spring of 2019, a CSEPP Medical Capabilities Review (MCR) was conducted at a Pueblo County hospital, at two fire departments, and with the ambulance provider. This project was a facilitated self-examination of a wide range of chemical response preparedness capabilities: triage, decontamination, treatment, etc. Plans and procedures reviewed during the MCR addressed a range of topics, including tracking information on potentially exposed individuals from the site of exposure through to the hospital.

During the annual CSEPP exercise, held a few months after the MCR, a new Patient Tracking Tool, which contained patient/victim identification, transportation status, and hospital destination/assignment, was piloted at the Pueblo County EOC. During the exercise, inconsistent patient counts for the 39 simulated patients were reported by different sources revealing the need for both the new tool and better coordination of patient tracking information. After analyzing the exercise results, exercise planners began the development of a functional exercise in FY 2019 that focused on patient tracking.

Less than two months after the CSEPP exercise, patient tracking capabilities were tested during a tragic multi-injury accident in the County. On June 23, 2019, a church charter bus with nine high school students and six adults traveling from Denver to New Mexico went off the highway and hit a bridge embankment. Two individuals, including the driver, were killed, and the other passengers suffered injuries ranging from minor to critical.

Based on the capacity of the vehicle, fourteen ambulances and three helicopters responded to the crash site. Five passengers were trapped inside the bus and had to be freed by responders. Twelve patients were sent to Pueblo hospitals, and one passenger went to a hospital in Colorado Springs. The severity of the injuries and the nature of the accident made patient tracking a multi-day challenge. "Our field responders, 911 staff, communication plans, emergency room trauma teams, incident command structure, and coordinated patient tracking all passed with flying colors," says Pueblo County's Emergency Services Bureau Chief Mark A. Mears, "and the primary reason is the cooperative planning, training, and exercise structure that CSEPP has provided to this community." To ensure that the issues and challenges arising during FY 2019 are appropriately reflected, the functional exercise mentioned above is now scheduled for early FY 2020. In doing so, Pueblo County continues its implementation of a cycle of continuous improvement driven by real-world events, training, and exercises.

Appendix A: Colorado

The Pueblo Chemical Depot (PCD) is located approximately 14 miles east of Pueblo, CO, where chemical weapons have been safely stored since the 1950s. The depot occupies 23,000 acres and stored 8.5 percent of the original U.S. chemical weapons stockpile in the form of mustard blister agent housed in mortars and projectiles.

Destruction of the stockpile is the responsibility of the U.S. Department of Defense's (DOD) Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA), which oversees the Pueblo Chemical Agent-Destruction Pilot Plant

(PCAPP). Primary agent destruction at PCAPP continues through a two-phase process of neutralization, in which mustard agent is mixed with hot water and a caustic solution, followed by bio-treatment, in which sewage treatment bacteria consume the organic components of the hydrolysate by-product from neutralization. In 2019, the U.S. Army removed the Explosive Destruction System used to destroy those munitions determined to be unsuitable for processing in the main plant and applied for a permit to use Static Detonation Chamber technology to serve in this role. PCD shares daily work plans, highlighting weather conditions, planned activities, and associated hazards, with Federal Emergency Management Agency (FEMA), State of Colorado, and Pueblo County staff, enhancing situational awareness of depot operations by off-post emergency personnel.

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

Listed below are the most significant accomplishments of the fiscal year as reported by the Pueblo CSEPP community.



The Pueblo County Alternate Joint Information Center was activated during the 2019 CSEPP Exercise.

Fiscal Year 2019 Accomplishments

Administration

The Colorado CSEPP community maintained compliance with all 12 benchmarks in Fiscal Year (FY) 2019. Figure 4 illustrates total CSEPP grant expenditures to support preparedness in Colorado during the last three fiscal years. The increased CA award in FY 2019 was primarily a result of the replacement of two Pueblo County HazMat trucks and a Colorado State EOC automation systems refresh.

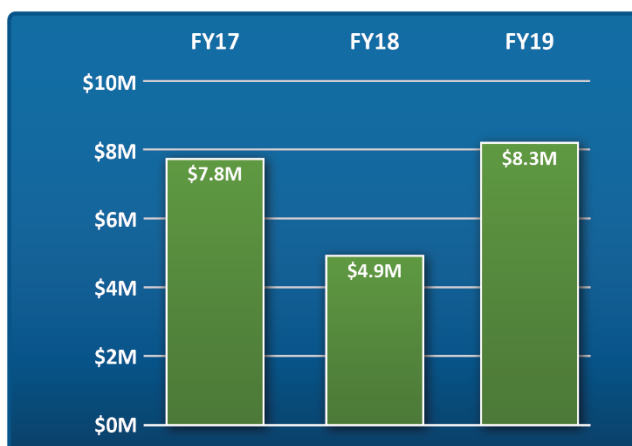


Figure 4: Colorado CSEPP Programmatic Spending

Alert and Notification

Pueblo County replaced its existing outdoor warning system in 2018. The 20 sirens, along with poles and control equipment, were replaced and the new equipment fully tested. The warning tone is followed by a verbal message in English and Spanish instructing people to go indoors and turn on the radio or television to receive more information. Activation units now poll the sirens twice daily and provide an electronic notification on each siren's status. The system is being expanded with two additional sirens to enhance coverage for workers at PCAPP and citizens at PuebloPlex (an area within PCD renting unused storage and manufacturing space to the public). Installation and systemization of these two sirens will be complete by the end of calendar year 2019.

Pueblo County distributed weather radios in 2018 to serve as the primary method for public notification of an incident involving the chemical stockpile at PCD, thus providing a long-term preparedness legacy from the program. Free of charge, these radios have been placed in nearly 1,100 occupied structures in northeastern Pueblo County in areas immediately surrounding PCD, as well as at the depot itself. Additional weather radios are available at community events to meet emerging requests. The radios operate on the National Weather Service broadcast signal and automatically relay emergency information. In the event of an emergency, the radio will sound a distinctive warning tone followed by a voice message that explains the nature of the emergency and what actions to take. Citizens will hear the weather radio tested weekly.

Colorado CSEPP is a major factor in efforts to implement the Integrated Public Alert and Warning System (IPAWS) at the State and local levels. Pueblo County conducted a successful demonstration of its IPAWS alerting system with support from the national IPAWS test laboratory on the day prior to the FY 2019 CSEPP exercise. (Pueblo County also continues to encourage citizens to register their cellular phone to opt in to local emergency alerts.)

The State views IPAWS as an important, complementary element in a broad-based alert system to reach residents and visitors about emergencies that can affect the entire State. The State encourages local agencies to opt in to IPAWS to receive a broader array of local emergency notifications. To support these goals, the State held an IPAWS Alerting Authority Workshop in October 2018 attended by Pueblo County and a number of other interested jurisdictions in the State. Colorado CSEPP continues to actively participate in CSEPP working groups that evaluate the test results, inventorying local equipment to determine how different equipment processes IPAWS messages and identifying areas for future testing.

Automation

As an outgrowth of their CSEPP-sponsored critical systems infrastructure exercise in FY 2016, staff continue to participate in monthly county critical systems infrastructure meetings with public and private organizations. They are also leading the planning for a county-wide cyber continuity of operations workshop scheduled in early FY 2020.

Pueblo County continues to serve on the WebPuff Change Control Board that develops, reviews, and oversees modifications to the WebPuff software.

DHS/FEMA's Community Lifelines approach was implemented at the Federal, State, and local levels to support situational awareness activities during the Pueblo CSEPP Community Exercise 2019 (PCD EX19).

The State of Colorado is a member of the WebEOC® User Advisory Board. To simplify processing requests for disaster assistance, the State has incorporated Incident Command System (ICS) Form 213 RR (Resource Request) into WebEOC. A resource order can now be entered at the lowest jurisdictional level (e.g., city or town) within the State, and there is no need for duplication of the order at subsequent levels during the approval process. Counties and cities are also able to track their own resource requests on the same board.

Communications

Interoperability of the digital trunk radio system (purchased through CSEPP) among a range of local response organizations—including PCD, the City of Pueblo, and Pueblo County—was demonstrated during mutual aid responses and the annual CSEPP exercise.

Information exchange among Pueblo County, the State of Colorado, and PCD continues to be supported by the common use of WebPuff and WebEOC for sharing daily work plans and coordinating potential response activities.

In cooperation with an ongoing State of Colorado project, Pueblo County completed the replacement of its existing microwave communication infrastructure in FY 2019, following

acceptance testing and removal of the outdated equipment. Pueblo County also completed an upgrade of its 911 telephone system in FY 2019.

Coordinated Plans

During the fiscal year, regional planning activities included CSEPP stakeholders. CSEPP team members worked to better coordinate and synchronize improvement plans, training and exercise plans, and stakeholder events. Pueblo County was a signatory to the initial Colorado South All-Hazards Region Threat and Hazard Identification and Risk Assessment (THIRA) and will be conducting its own THIRA in early FY 2020. Through cooperation, these programs better leverage existing opportunities and resources to further the CSEPP mission of increasing existing capabilities across the community.

A review of the CSEPP Incident Annex to the State Emergency Operations Plan (EOP) (November 2016) began in FY 2018. The updated State EOP, including the CSEPP incident-specific annex, was signed by the governor on September 30, 2019.

Pueblo County, with participation from PCD, has been conducting a comprehensive update and rewrite of the County Emergency Operations Plan (EOP) (including an incident annex for CSEPP and the Joint Information Center [JIC]/Joint Information System [JIS]) to improve adherence to national standards. The goal for promulgating the new EOP is FY 2020.

Emergency Operations Centers

The Emergency Operations Center (EOC) at the Pueblo County Emergency Services Center was activated for the annual CSEPP Exercise, which assessed facility processes and equipment. Although the Pueblo EOC was not activated during FY 2019, past incident after-action reviews contributed to a training and exercise plan incorporating key exercises events, anticipated natural hazards and pre-planned events, and planning opportunities. The emphasis going forward is on sustained operations and resource ordering. EOC training was conducted monthly to maintain proficiency and to exercise changes to EOC staffing and procedures.

The Alternate JIC location at PDPHE was tested during the annual CSEPP Exercise. The facility began planning for a technical systems upgrade in FY 2019.

In FY 2019, the State of Colorado began a two-year technology improvement project for the audio-visual equipment in the SEOC with a series of planning meetings. During FY 2018, the State EOC conducted quarterly exercises and activated on numerous occasions in support of multiple wildfires, the “Bomb Cyclone,” a school shooting, potential flood emergencies, and quarterly PCD Chemical Accident/Incident Response and Assistance (CAIRA) exercises.

Exercises

PCD EX19 was conducted on May 8, 2019 to demonstrate the emergency response capabilities of the Colorado CSEPP community. Exercise design and planning was accomplished by U.S. Army and FEMA Co-Directors and representatives from PCD, Pueblo County, PDPHE, and the State of Colorado. The core capabilities established under the National Preparedness Goal were reflected in each jurisdictional extent-of-play agreements, exercise briefings, and the after-action report.

Off-post exercise participants included State and local emergency management and public-safety organizations, private-sector emergency medical services, amateur radio, local schools, three local hospitals, and the American Red Cross. The scenario consisted of two events initiated by an earthquake and series of aftershocks:

- A vehicle accident on-post during the transport of 4.2-inch mortar rounds containing mustard agent; and
- The derailment of a chlorine tanker car at the railyard in downtown Pueblo.

During the exercise, the off-post community demonstrated a full range of response capabilities, including the use of incident command; operation of county and State EOCs to support response coordination among Federal, State, local, and private-sector officials; use of multiple communication channels, including public safety radio, telephone hotlines, and amateur radio; selection and implementation of protective actions for the public, including schools and other special populations; establishment of a safety perimeter with access/traffic control points; and operation of an evacuation center and shelter with the activation of survivor support services, including those for individuals with access and functional needs. Local hospitals and field response organizations demonstrated the ability to triage and decontaminate potentially contaminated individuals and conduct follow-on care for patients. Finally, a JIC/JIS (consisting of local, State, and Federal agency representatives) coordinated and disseminated emergency public information to the public and media, monitored and used social media, conducted a news conference, and responded to public and media inquiries.

A team of evaluators provided a draft after-action report to the community on May 13, 2019. A community-wide after-action report with improvement plans was published on July 12, 2019. Strengths were noted in the capability for cross-activation of PCD and Pueblo County sirens, the presence of a K9 team at the shelter, response equipment interoperability, and use of a digital status board in the JIC. Observations were made to improve response communication, decontamination operations, and patient care.

Pueblo County actively participates in quarterly PCD CAIRA exercises. Pueblo County, Fort Carson, and the FBI also participated in a Recapture/Recover tabletop exercise held at PCD on April 11, 2019, with breakout sessions for emergency management, security and law enforcement, public affairs, and fire response issues. The exercise examined the response to

criminal theft of a chemical munition. Lessons learned from these efforts, as well as those not linked to CSEPP, are integrated into Pueblo County's training, planning, and exercising cycle.

Pueblo County held an Improvement Planning Workshop (IPW) in August 2019 and a Training and Exercise Planning Workshop (TEPW) in September 2019. The IPW provided a forum for internal and external stakeholders to review action items from the previous year's after-action reports and real-world events. The goal is to identify strengths and areas for improvement and then prioritize the capabilities associated with each of these areas for improvement.

The outputs from the IPW supported the TEPW, a collaborative effort to update the multi-year training and exercise plan. Considering previous exercises and guidance from elected and appointed officials, the community identified and aligned training and exercise priorities to a common set of objectives. Specific training and exercises were then identified to meet these community objectives/core capabilities in a coordinated and integrated manner to maximize the use of available resources and prevent duplication of effort. In part, these efforts support scenario development and objectives for the upcoming CSEPP exercise.

Medical

PDPHE continues to take the lead in coordinating the CSEPP medical preparedness capability.

In conjunction with local emergency responders and medical services, three Pueblo area hospitals (Parkview Medical Center–Main, Parkview-Pueblo West Medical Center, and St. Mary-Corwin Medical Center) participate in CSEPP preparedness activities. CSEPP provides equipment, training, and technical assistance to enhance medical preparedness for pre-hospital care and in-hospital treatment of patients exposed to chemical agents. The program also works with area public safety and health initiatives to enhance integration of the program locally.

A CSEPP Medical Capabilities Review (MCR) was conducted in Pueblo County during FY 2019. Community agencies participating included a local hospital, two local fire departments, and the ambulance provider responsible for emergency medical service coverage of the Pueblo area. This project was intended to refine and optimize existing chemical incident response preparedness and maintain maximum readiness to support chemical agent destruction. Self-assessment survey questionnaires (from the CSEPP Medical Evaluation Guide) were completed by participating organizations. A medical review team of CSEPP partners, composed of physicians, nurses, fire and EMS officials, hospital emergency managers, HazMat and training personnel, and representatives of the U.S. Army Public Health Center, then conducted follow-up site visits to clarify responses and gather additional information.

Upon completion, a final report was distributed to the participants in May 2019. Overall, representatives of the participating organizations stated that the self-assessment process was of great benefit in identifying not only key components of chemical and mass casualty incident preparedness but also in setting priorities for achieving ongoing improved response and

preparedness capabilities. Potential shortcomings in achieving maximum readiness common to more than one organization included:

- Telecommunications Service Priority Program participation;
- Disaster recovery and continuity of operations;
- Public information officer (PIO) and Incident Command System training and exercises;
- Management of unsolicited donations;
- Respiratory Protection Program procedures; and
- Mustard agent treatment algorithm.

The project produced recommendations that can significantly enhance the readiness and capabilities of the local medical community in support of chemical operations at PCD and PCAPP. Such enhancements are also likely to benefit the Pueblo community beyond the conclusion of chemical operations.

During the fiscal year, medical providers in the CSEPP community completed the following training: refresher classes in hospital hazardous operations and hazardous materials operations, hospital ICS training for command staff, PPE training for fire and law enforcement responders, patient decontamination field training, a moulage technician course to support field exercises, and the U.S. Army's Toxic Chemical Training Course.

PDPHE CSEPP participates in the South Region Healthcare Coalition, the Local Emergency Planning Committee, the Southern Colorado Regional Trauma Advisory Council, the Emergency Medical Services Council, Sheltering and Animal Services, the CSEPP Exercise Planning Group, the Pueblo County Emergency Support Function #8: Public Health and Medical, Mitigation, Disability Inclusion in Emergency Planning, and community stakeholder meetings. In July 2019, PDPHE and other South Region Healthcare Coalition members participated in a Healthcare Coalition Incident Command System tabletop exercise in Pueblo County. This community involvement has led to better integration and inclusion of CSEPP at the local level and allows first responders and emergency planners to increase opportunities for CSEPP training and awareness.

Protective Actions

In FY 2019, the Colorado Integrated Process Team (IPT) established and held several meetings for a new Civil Rights and Civil Liberties/Access and Functional Needs (AFN) Advisory Group consisting of State and local representatives. The group drafted a work plan for consideration by the IPT in June. This approach reflects initiatives to enhance inclusivity in both emergency planning and response:

- In December 2018, the Colorado Division of Homeland Security and Emergency Management (CDHSEM) and FEMA Region VIII jointly provided disability awareness training to representatives of the Pueblo CSEPP community.
- As a follow-up, at the Community IPT meeting in February, CDHSEM provided disability awareness training and then presented a framework that integrates communications, health maintenance, independence, safe self-determination, and transportation factors in assisting people with disabilities.
- In May, CDHSEM held a South Region AFN workshop as part of a series aimed at educating communities and sharing best practices and lessons learned across the State.
- A local non-profit center for independent living has been selected for inclusion in future CSEPP exercise and other emergency planning activities.
- CSEPP staff will be required to complete training on integrating people with disabilities in disaster operations.

CSEPP provided respirator fit testing to 526 fire and law enforcement personnel in Pueblo County, done annually in accordance with Occupational Safety and Health Administration regulations.

To address the upcoming (FY 2021) transition of some PCD property (known as PuebloPlex) to Pueblo County, the PCD and Pueblo County have begun discussing associated planning issues, including notification and protective actions for the public that may be present in these areas.

Public Outreach and Education

The “Prepare Pueblo” campaign continued during the fiscal year. This outreach campaign is a blended approach that includes the use of a website, social media, and paid advertising (theater advertisements and roadside billboards). Social media campaigns were held throughout the year and included daily posts during National Preparedness Month.

Message strategy was developed using survey results and lessons learned from other CSEPP sites. The campaign reminds residents of the importance of preparedness at home, work, and school. Specific topics include “sirens, sounds, and messages,” “your new weather radio,” “making and practicing an evacuation plan,” “registering phones for alerts,” and “preparing for all types of disasters.” Key messages were developed to educate residents as to how they would receive emergency alerts and information and how to learn if a resident lived inside or outside of an emergency zone. Since protective actions differ for those most at risk, it is important to educate residents living inside an emergency planning zone.

The Pueblo County Sheriff’s Office designed and implemented a new website in FY 2019. The website provides an interactive portal for citizens to access pertinent information, whether about emergency services, including CSEPP, or law enforcement.

As agent destruction operations continued at PCD and began in Kentucky, local, national, and international news media outlets continued to run stories on chemical agent destruction in the United States. Community PIOs coordinated closely with DOD public affairs officers to ensure that consistent messages were delivered to the public.

The Pueblo County PIO maintains a public outreach and education program to provide protective action information to residents near PCD that includes materials for non-English speakers. An annual emergency preparedness calendar, printed both in English and Spanish, was produced and distributed to community members. Emergency public information was distributed to approximately 50 persons at a Migrant Head Start Program held during a school parent night. The CSEPP team also participated in a number of community outreach activities focusing on preparedness themes, including the annual Safety Jam for kids and the annual Veteran's Day celebration in the town of Avondale.

The Pueblo County CSEPP PIO continued to maintain a cadre of trained individuals, known as the Risk Communications Network (RCN), to help with disasters. The 40 members of this network were recruited from public safety organizations; not-for-profit organizations; hospitals; the business community; and Federal, State, and county agencies. In 2019, CSEPP offered members specific training to further develop skills relating to their service as PIOs, including case studies on public affairs response to wildfires, communicating to people with limited English proficiency, the role of social media in emergencies, and emergency first aid. In addition to participating in CSEPP training and the annual exercise, RCN members have deployed to assist with other emergencies in their community and neighboring counties. In FY 2019, three events resulted in staff activations of the EOC that included PIO support. These actual activations resulted in lessons learned to support future events.

Following the National Emergency Alert test in October 2018, Pueblo County conducted an online survey to assess the effectiveness of the reception of the test messages. Public outreach was conducted to encourage community members to respond to the community survey.

Training

FY 2019 was again a busy year for training in Pueblo. Through more than a dozen CSEPP-sponsored courses, CSEPP partners received training in topic areas ranging across incident command, hazardous materials response, exercise design and evaluation, emergency planning, grants management, public affairs, automation, and continuity of operations.

Pueblo County hosted a local offering of FEMA's Master Exercise Practitioner Program for Colorado CSEPP partners in FY 2019. The course is designed to foster the capabilities of emergency management exercise personnel in every phase of the exercise process in accordance with the Homeland Security Exercise and Evaluation Program. Forty local, State, and Federal officials attended this MEPP offering and will be completing their final project in FY 2020.

Future Planning

Ongoing agent-destruction operations are bringing the end of CSEPP in Colorado closer. In FY 2019, the Closeout Working Group established by the Colorado IPT held a second workshop to identify and refine potential program closeout projects and expenses for inclusion in the next lifecycle cost estimate. The working group includes representatives from organizations participating in the IPT and meets in conjunction with the Community IPT. The working group also began collaborative identification and tracking of important closeout milestones and decision points as the Army's demilitarization schedule became more solidified.

Another workshop is scheduled for FY 2020 to review, discuss, and initiate the regulatory process and associated issues for retaining grant-acquired property after the end of the program. In addition to its traditional coordination role, FEMA provides technical assistance, including best practices from the six previous site closeouts, to assist with Pueblo closeout planning.

At the same time, FEMA continues to provide technical support to Pueblo County to examine options for sustaining certain capabilities after CSEPP has ended. This analysis, scoped against resources and the remaining hazards in the community, considered targeted levels for operational coordination, operational communications, and public information and warning.

Whole Community Preparedness in Kentucky

Effective strategies for more-inclusive emergency preparedness strategies continue to be explored in the communities near the two remaining U.S. Army chemical stockpile sites in Colorado and Kentucky. The Federal Emergency Management Agency's Chemical Stockpile Emergency Preparedness Program (CSEPP) partnered with the U.S. Department of Homeland Security's Office for Civil Rights and Civil Liberties (CRCL) to assist these communities in the further inclusion of individuals with access and functional needs and limited English proficiency.

On June 19, 2019, representatives from FEMA/CSEPP and CRCL were joined by CSEPP partners Monica French, Kentucky Emergency Management public information officer, and Dustin Heiser, Madison County, KY Emergency Management/CSEPP director, in presenting at the National Homeland Security Conference in Phoenix, AZ. The group provided an overview of key disability and language-rights concepts, authorities, and tools and highlighted CSEPP's work toward more-inclusive emergency preparedness within Kentucky's CSEPP communities.

"The conference was a great first step in addressing civil rights and civil liberties issues nationally. Communities struggle with how to incorporate preparedness for individuals with limited English proficiency, disabilities, and access and functional needs. The discussion-based forum was successful for sharing information and best practices," said Monica French.

CSEPP has revised county plans to address access and functional needs and continues to build relationships with stakeholder organizations who support people with disabilities and those with limited English proficiency. Program personnel are also assessing outreach efforts to find better ways to engage communities effectively and expand training and exercises to include greater participation from the access and functional needs communities.

Madison County also held *Prepare Fairs*. These events sought to start attendees on the path of individual preparedness by assisting them in developing individual emergency preparedness plans, building emergency kits, understanding their CSEPP zone and what that means, and helping participants understand how to shelter in place for a stockpile event.

"This endeavor has provided a pilot for future success in providing preparedness information to the citizens of Madison County," said Dustin Heiser.

Working with these partners, the program's goal is to use inclusive emergency planning to enhance community preparedness and resilience.



The Madison County Emergency Operations Center would serve as the central coordination point for an accident involving the chemical stockpile at the Blue Grass Army Depot.

Appendix B: Kentucky

Blue Grass Army Depot (BGAD) is located on 15,000 acres south of Lexington, KY near the city of Richmond. The stockpile is maintained on 255 acres of land near the northern border of the depot. The storage of blister agents began in 1944, and nerve agent storage commenced in the mid-1960s. The safe storage of the chemical stockpile remains an important mission of Blue Grass Chemical Activity (BGCA).

Destruction of the stockpile is the responsibility of the U.S. Department of Defense's (DOD) Program Executive Office, Assembled Chemical Weapons Alternatives (PEO ACWA). During this fiscal year, the Blue Grass Chemical Agent-Destruction Pilot Plant (BGCAPP) began destroying the stockpile of chemical weapons currently in storage at BGAD. The main destruction plant will utilize neutralization followed by supercritical water oxidation (SCWO) to destroy munitions containing nerve agent. Additionally, Static Detonation Chambers, an explosive destruction technology, are being used to augment BGCAPP's neutralization/SCWO technology to destroy the mustard agent-filled projectiles in the Blue Grass stockpile, many of which have been found unsuited for processing through the main plant.

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).

The Kentucky CSEPP community includes 10 counties that have distinct planning zones. CSEPP zones are geographical areas around the chemical depot defining the areas that are included in the preparedness activities. Zones most at risk from a chemical release are referred to as 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, and Jackson Counties and the 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 it provides decontamination and medical treatment, mass care, host facilities, and mutual aid support to at-risk jurisdictions.

The most significant accomplishments of the year as reported by the Blue Grass CSEPP community are detailed below.

Fiscal Year 2019 Accomplishments

Administration

The Blue Grass CSEPP community maintained compliance with all 12 benchmarks in Fiscal Year (FY) 2019. Figure 5 illustrates total CSEPP funding (grant dollars and Federal technical support) to support preparedness in Kentucky during the last three fiscal years. Major funding for the fiscal year included the initiation of the second phase of the replacement of the Madison County interoperable communication system and its community sirens, both of which had reached the end of their lifecycle.

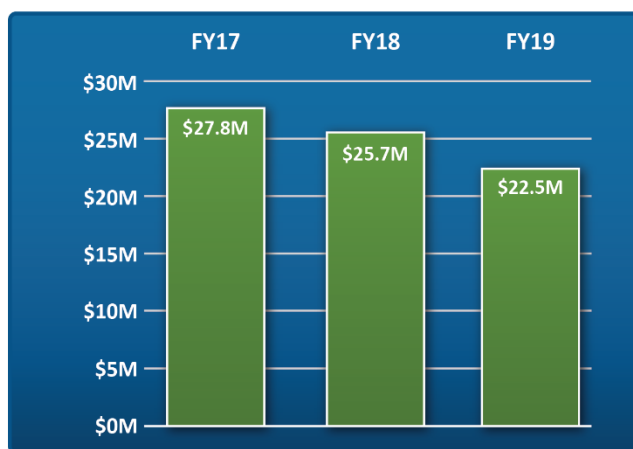


Figure 5: Kentucky CSEPP Programmatic Spending

Throughout the year, the Kentucky CSEPP program continued to refine its financial reporting and grants managements systems. All CSEPP counties and the Commonwealth use a common web-based management software application to track developments during disasters. This application was adapted to add financial reporting functions, allowing the Commonwealth and all 10 county governments to share a common platform for financial reporting and grants management. Since the same software application is used in day-to-day management functions, personnel routinely use the system and are familiar with its functions. This familiarity increases the proficiency of those application users during disasters. The Commonwealth also continued its refinements to the lifecycle cost estimating systems and the grants reimbursement processes. CSEPPWebCA is the financial tool that State and local CSEPP jurisdictions use to manage grants, work plans, budget line items, and statements of work. In addition to financial reporting,

these systems allow counties to identify core capabilities for specific budget line item requests, enhancing the link between budgets and specific emergency preparedness functions. CSEPP continued to streamline CSEPPWebCA quarterly reporting. The process allows counties to update their project progression and link those projects to the CSEPP benchmarks and the Federal Emergency Management Agency's (FEMA) core capabilities benchmarks. CSEPPWebCA also allows FEMA to maintain visibility and provide oversight and accountability.

Ensuring CSEPP stakeholders were trained on Federal grant regulations at 2 CFR Part 200¹³ continued to be a priority for KY CSEPP during the fiscal year. A grants management workshop was held in June 2019 to supplement individual courses that are conducted throughout the year. FEMA Regional personnel conducted site visits to all 10 counties and the Commonwealth to ensure grantees were aware of changes and had an understanding of the grant objectives and guidelines. During the fiscal year, an increase in technical assistance visits occurred in all of the Kentucky jurisdictions, with FEMA Region IV personnel spending over a combined 200 days in the communities. These additional visits resulted in improved communications between the State and local partners and FEMA.

The Blue Grass CSEPP Integrated Process Team (IPT) continued to function as the central program management forum in FY 2019. During the year, various work groups continued to address issues and propose solutions, improvements, new innovations, and updated procedures for IPT consideration. Each year, the IPT evaluates preparedness goals and reports its benchmark compliance. During the fiscal year, an in-process review (IPR) of the community IPT occurred, and improvements to the team's mission, function, and operations over time were noted.

Closeout planning continues in the Commonwealth. A workgroup continued to develop frameworks to use during the closeout process. Items under consideration include determining what capabilities will be maintained and what will be discontinued after closeout. Personnel retainment, equipment disposition, and budgeting for closeout costs are included in the discussions. The goal of careful closeout planning is to efficiently transition the capabilities to the State and local jurisdictions after CSEPP funding ceases. FEMA provides technical assistance to the work group, and lessons learned from previous CSEPP closeout initiatives have been captured and are available to this work group.

Alert and Notification

Additional Integrated Public Alert and Warning System (IPAWS) capabilities in CSEPP communities continued in FY 2019. Training and coordination with the FEMA IPAWS Program Management Office continued with test messages sent by Madison and Fayette Counties during the annual CSEPP exercise.

¹³ https://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title02/2cfr200_main_02.tpl

Procurement activities to upgrade and replace the Madison County Siren system are underway.

Planning is also underway in Madison County to upgrade Advisory Alert Radios (AARs) that will provide the added capability of receiving weather alerts. Madison County officials and FEMA engineering support personnel are evaluating technology options for the new AARs.

Estill County completed updates to its weather alert radios that would also be used to warn residents of a chemical emergency BGAD. Estill County is also assessing the viability of enhancements to its microwave system; reflecting CSEPP's regional approach, this assessment is occurring in coordination with Madison County's radio system replacement.

Automation

Kentucky CSEPP counties and the Commonwealth use the same commercially available software application to share emergency preparedness information. Several working groups convened to coordinate automation projects within the counties and the Commonwealth, including this emergency preparedness information sharing software. This software program was upgraded in FY 2018.

Planning began in the fiscal year for additional meteorological towers in Fayette and Estill counties. These towers contain equipment that sends meteorological data into the WebPuff modeling program used for the program.

CSEPP Performance Reports that track mission areas and core capabilities as they relate to the CSEPP Benchmarks were added to CSEPPWebCA during the fiscal year.

Communications

Several communications systems that were either fully or partially funded by CSEPP were used throughout the fiscal year in support of emergency events or exercises. These exercises and real-world events allow emergency preparedness personnel to hone their skills and test equipment that would be used in support of a U.S. Army stockpile chemical accident.

The communications systems between the U.S. Army and the offsite community are tested daily and used in drills and exercises throughout the fiscal year.

The Madison County interoperability public safety system is reaching its lifecycle end, and engineering planning has begun to replace the existing system. Careful consideration and planning are underway for the eventual end of CSEPP, resulting in the county absorbing the cost of the ongoing maintenance of the system. Madison County is investigating the possibility of having regional partners that would create a regional system and enhance the communities' CSEPP and all-hazards response capabilities.

Madison and Estill Counties' microwave systems will be replaced as part of the Madison County radio system. This replacement will also provide a new connection to BGAD. This new connection will allow a redundant communication path to both the IRZ counties and BGAD. The microwave path will provide a direct connection that bypasses the current infrastructure's single point of failure. Engineering analysis is also underway to determine the feasibility of Estill County joining Madison County's 800 MHz system.

Estill County is currently procuring replacement generators at two tower sites (Chestnut Stand and Senior Citizen Center). Installation will occur in the last quarter of calendar year 2019. An additional generator for the Happy Top tower site is scheduled for FY2020.

Kentucky Emergency Management (KYEM) is working in conjunction with Jackson County on consolidating two radio tower sites into a single enhanced communication site that will support both State and local partners. A request for proposals was published, and a contract award is expected in late calendar year 2019.

KYEM is currently considering options to upgrade consoles in their emergency operations center in Frankfort, KY.

The Garrard County Poor House Road Tower Site radio tower replacement was completed in the fiscal year, and systemization is underway to bring the new site online.

Engineering planning for the Highway 290 Tower Site in Jackson County has been completed, and ground clearing began in September 2019. Construction is planned to begin in the spring of 2020.

Coordinated Plans

The Kentucky CSEPP community formed a work group to develop a Recovery Sampling and Analysis Framework. This document outlines procedures for county and State emergency management agencies to coordinate with the U.S. Army on environmental sampling and analysis procedures following a chemical release in the community. The planning group, with membership from State agencies, affected counties, and the U.S. Army, had scheduled planning conference calls and conducted a day-long workshop in January 2018 to identify available resources to carry out the sampling mission. The Framework has been drafted and is currently under review. A final workshop was held in December 2018.

Emergency plans are updated annually, and KYEM routinely meets with CSEPP counties to ensure coordinated CSEPP plans are current. FEMA also provides technical assistance throughout the year to assist with planning efforts. Each CSEPP county reviewed and updated their CSEPP County Incident-Specific Plans (ISPs) in 2018. The plans were then reviewed by FEMA and delivered to the State on January 7, 2019. The goal of this effort was to ensure that

ISPs were in place in CSEPP counties prior to the initiation of demilitarization operations at BGAD.

Emergency Operations Centers

EOCs serve as the central location where emergency managers, elected officials, and emergency support function representatives from responding agencies meet to plan and implement emergency protective actions during an emergency. EOCs in the participating CSEPP counties and at the Commonwealth have undergone renovation, and new facilities were built in some cases to better support emergency management operations.

KYEM

The KYEM EOC that underwent renovation several years ago was activated during this fiscal year for weather events. KYEM also participated in drills and exercises with the CSEPP partners and the “Shaken Fury 2019” FEMA/ Central United States Earthquake Consortium (CUSEC) earthquake exercise series (successfully implementing the “Lifelines” concept). In addition to emergency management activities, the Commonwealth and county facilities are used for training events and program meetings.

Madison County

Madison County completed renovations to its 25-year-old EOC in Richmond in FY 2016. In FY 2019, EOC technicians who staff the facility were hired and received training throughout the year. During the fiscal year, the EOC was staffed 24/7 in support of the agent destruction mission at BGAD. The facilities are also used throughout the year for program training courses and serve as the venue for CSEPP meetings. Madison County is currently in the procurement process for the replacement of an emergency generator at the EOC.

Estill County

FEMA is providing engineering support to Estill County to add a “safe room” for emergency personnel to withstand stronger tornado-force winds. As in other CSEPP counties, the Estill County EOC also serves as a training and meeting facility for program partners. Estill County has received quotes and estimates for the project, and an architect has been hired. A blueprints review is underway. An additional emergency generator for the facility is scheduled for FY2020.

Lexington-Fayette Urban County Government

During FY 2019, emergency personnel conducted training and exercises in the new EOC facilities.

Laurel County

During FY 2019, Laurel County emergency personnel trained and conducted exercises in the Laurel County EOC that has recently received audio visual updates that enables multiple displays from EOC positions. Laurel County has completed Phase 1 of the uninterruptible power supply project and Phase 2 has started. This will ensure electrical service during a power outage. The Laurel County emergency personnel also received new decontamination tents with

accessories including generators and three (3) new trailers for the equipment in which were utilized in the 2019 CSEPP Annual Exercise.

Exercises

The Blue Grass CSEPP Community Exercise 2019 (BGAD Ex 19) was conducted on 18 September to evaluate the emergency response capabilities of the Blue Grass CSEPP community. Exercise design and planning were accomplished by the U.S. Army and FEMA Co-Directors and representatives from BGAD, the Commonwealth of Kentucky, and the 10 Kentucky CSEPP counties. Prior to this year's exercise, FEMA, the U.S. Army, and KYEM officials visited each county to review and assist with the development of the exercise extent-of-play agreements that identified capabilities that would be tested during the exercise. These site visits enabled the development of these agreements to be completed in a more efficient manner, saving time and effort during the planning process.

A scenario was developed to test the coordinated plans between the depot and the counties. Offsite participants included State and local emergency management and public safety organizations, amateur radio groups, schools in Madison and Estill Counties, and local hospitals. Community volunteers were used to role play medical patients.

During the exercise, a full range of response capabilities were conducted, including the use of incident command; response coordination among local, State, Federal, and private-sector officials; and the selection and implementation of protective actions for the public, including schools and other special populations and animals.

Hospitals and field locations (staffed by local first-responder organizations) tested their ability to triage and decontaminate (as necessary) potentially contaminated victims. A joint information center (JIC)/joint information system (JIS) (consisting of local, State, and Federal agency representatives) coordinated and disseminated news releases among multiple jurisdictions, monitored and used social media, conducted a news conference, and responded to public and media inquiries. During the exercise, Spanish translators staffed the JIC to provide information to Spanish speakers. The JIC also demonstrated the capability to use Spanish translation during news conferences. An American Sign Language interpreter was also used during the exercise news conference. A community-wide after-action report, including a corrective action plan, will be published in FY 2020. During the primary exercise week, over 160 evaluators monitored exercise play of approximately 2,000 participants in all 10 CSEPP counties, the Commonwealth of Kentucky Emergency Management Agency and the Blue Grass Army Depot. Evaluation data from additional community exercise activity conducted earlier in FY19, in conjunction with on-post Chemical Accident Incident Response and Assistance (CAIRA) exercises will also be integrated into the final report to give a broader picture of community preparedness.

One Madison County School District middle school displayed robust exercise participation and performance. The school successfully relocated over 600 students from their classrooms into a

shelter in less than four minutes. The emphasis placed on the exercise and the school's outstanding performance demonstrates their commitment to protecting their students.

In addition to the jointly managed U.S. Army/FEMA annual full-scale CSEPP exercise, the participating counties and KYEM participate in BGCA's quarterly Chemical Accident or Incident Response and Assistance (CAIRA) exercises to demonstrate the functionality of offsite EOCs and response procedures.

The robust use of mutual aid among CSEPP counties was new for FY 2019. Garrard County Emergency Management personnel traveled to the Madison County EOC to provide augmented staffing, and Garrard County first responders supported Madison County screening and decontamination.

During the fiscal year, a school exercise program was held to allow schools drills to be conducted during the quarterly CAIRA exercises at BGCA. These "out of sequence" exercises allowed FEMA to better deploy evaluators and reduce the number of venues needing review on the annual exercise day of September 18, 2019.

A Red Cross shelter exercise was held in Fayette County on June 19, 2019. By conducting this exercise independent of the full-scale exercise, the county was able to concentrate resources at one site, allowing a complete evaluation of its processes.

Medical

The Kentucky medical community continues to evolve to meet the needs of the CSEPP community. The CSEPP community has become a staple in the Regional Health Care Coalitions. As active participants the medical community collaborates with hospitals, public health departments, emergency management agencies, and other healthcare entities. These entities are organized to respond to mass casualty and catastrophic health events. By participating in this group, the CSEPP health and medical community continues to participate in Threat and Hazard Identification and Risk Assessment (THIRA), Regional Hazard Vulnerability Analysis (HVA), planning, resource management, training, and exercises. Participation in these elements of preparedness optimizes readiness to support chemical agent destruction. Last year's addition of the Kentucky Department of Public Health's Healthcare Preparedness (HP) Coordinator, who is also a member of the Healthcare Coalition, representation and participation in the Blue Grass Community IPT continues to be invaluable.

Throughout the fiscal year, CSEPP managers conduct site visits to first responder and first receiver organizations to review needs for equipment and supplies. Medical supplies such as first aid kits, vital sign monitors, lift chairs, and training mannequins were identified and procured.

In Madison County, Baptist Health Richmond Hospital (BHR) continues to set a high bar. This year the BHR leadership requested an evaluation that would focus on patient care beyond what was assessed in previous exercises. Their objectives were the following:

- Evaluate the appropriateness of chemical casualty care within the ED;
- Identify opportunities for improvement in chemical casualty care in clinical units other than the ED;
- Assess the ability of various disciplines within the hospital to provide care to chemical agent casualties; and
- Determine deficiencies in the various disciplines within the hospital to provide collaborative and effective treatment for chemical agent casualties.

A total of five simulated patients were evaluated. In summary, the staff of BHR showed a very high level of preparation for treating patients who had been exposed to nerve agent while concomitantly suffering from a variety of other illnesses and injuries. Communication between departments and disciplines was excellent, the collaboration between clinicians was exemplary and the opportunities to improve the overall care for their patients were enthusiastically received.

Personnel

Managing personnel continues to be a priority for KYEM and CSEPP participating counties. KYEM filled several key CSEPP-funded positions during the fiscal year, including a CSEPP project manager, financial officer, and training/exercise coordinator. County EOC positions were also filled in Fayette and Madison Counties.

Protective Actions

During the fiscal year, Kentucky hospitals updated their respiratory protection equipment that is used during the decontamination and treatment of patients. Also, partner fire departments switched from Powered Air Purifying Respirators (PAPRs) to self-contained breathing apparatus (SCBAs) for chemical decontamination. This allows firefighters to use familiar equipment and support fire operations long after CSEPP has ended. Both respirator systems will have life expectancies well beyond the program and will continue to enhance community preparedness and response.

In FY 2019, protective decontamination equipment was procured, including trailers to store and transport the systems to a site. Hazardous materials monitors were updated, and breathing apparatus for first responders was replaced in Garrard and Powell Counties.

Madison County has procured new shelter-in-place kits that include video instructions. The kits will be distributed to the at-risk residents of the county.

Public Outreach and Education

The Kentucky CSEPP community has funded public information officers (PIOs)/public affairs officers on staff at BGAD; KYEM; and Madison, Estill, Fayette, and Garrard Counties. The team of PIOs 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 the capability to deliver emergency public information during disasters. The PIOs work together to disseminate CSEPP information at fairs, public meetings, and other gatherings.

During FY 2019, CSEPP PIOs distributed calendars in English and Spanish. These calendars are an annual outreach product that contains detailed emergency information.

The Blue Grass Public Affairs Working Group continued to coordinate regional outreach activities and share public outreach materials throughout the community.

The Blue Grass Public Affairs Working Group and members of the PEO ACWA, BGAD, and disposal plant contractor public affairs staffs held regular coordination meetings throughout the fiscal year to provide situational awareness briefings of the respective agencies and coordinate public outreach events that included both onsite and offsite personnel.

Throughout the year, CSEPP PIOs staffed information booths at county festivals and minor league baseball and college football games, provided tours of their EOCs, conducted public speaking events to community groups, participated in back-to-school events, and visited community organizations to ensure emergency preparedness is provided.

The Madison County, KY CSEPP community hosted two *Prepare Fair* events in February and June as part of the Partnership for Public Service's 2018 Excellence in Government (EIG) Program. The fairs provided simple, affordable, and realistic steps and activities for strengthening individual preparedness and resiliency for residents with disabilities. The events provided a framework to engage family and caregiver support networks and assisted local CSEPP jurisdictions with expanding inclusive emergency preparedness planning.

Prior to the CSEPP exercise in September, Madison County ran a radio campaign to promote the exercise and remind residents that September is National Preparedness Month. The radio spot included the BGCA Commander and the Madison County Emergency Management director, who discussed how the U.S. Army and counties prepare together and that residents should also ensure their personal emergency plans are in place.

Other outreach initiatives include the innovative design of a walking path through a Clark County park that passes by the EOC building. Public outreach materials are made available to walkers as they pass by the building.

School outreach programs continued in Garrard County with the PIO providing students with public outreach materials and attending community events such as the community Easter egg hunt that is attended by hundreds of residents.

Training

Training continues to be a priority for the program and especially critical in ensuring new hires are onboarded quickly.

During the fiscal year, over 500 hours of instruction for 400 students were offered. Course offerings included the following:

- 13 exercise practice topics including donning and doffing personal protective clothing;
- 14 public affairs training courses including Spokesperson, Social Media, Crisis Communications, and Technology;
- Exercise evaluator training; and
- Master Exercise Practitioner Program (MEPP) Phase II course, attended by 40 students.

In addition to program-sponsored training, partners provided training at the local level to ensure emergency management personnel and first responders maintain their preparedness and response capabilities.

Appendix C: CSEPP Stakeholders

State of Colorado

- Pueblo Chemical Depot
- Colorado Division of Homeland Security and Emergency Management
- Pueblo County (IRZ)
- Pueblo City-County Health Department

Commonwealth of Kentucky

- Blue Grass Army Depot
- Kentucky Emergency Management
- Clark County (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: Abbreviations

AAR	Advisory Alert Radio
ACWA	Assembled Chemical Weapons Alternatives
AFN	Access and Functional Needs
ATO	Authority to Operate
BGAD	Blue Grass Army Depot
BGCA	Blue Grass Chemical Activity
BGCAPP	Blue Grass Chemical Agent-Destruction Pilot Plant
CA	Cooperative Agreement
CAIRA	Chemical Accident or Incident Response and Assistance
CAP	Common Alerting Protocol
CDHSEM	Colorado Division of Homeland Security and Emergency Management
CFR	Code of Federal Regulations
CMA	U.S. Army Chemical Materials Activity
CO	Colorado
COOP	Continuity of Operations
CRCL	DHS Office for Civil Rights and Civil Liberties
CSEPP	Chemical Stockpile Emergency Preparedness Program
CTUIR	Confederated Tribes of the Umatilla Indian Reservation
DHS	U.S. Department of Homeland Security
DOD	U.S. Department of Defense
EIG	Excellence in Government
EMI	FEMA Emergency Management Institute
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EOP	Emergency Operations Plan
EOPT	Emergency Operations Planning Template
EPZ	Emergency Planning Zone
FAPO	Financial Assistance Policy and Oversight
FEMA	Federal Emergency Management Agency
FY	Fiscal Year
HQ	Headquarters
HSEEP	Homeland Security Exercise and Evaluation Program
HVA	Hazard Vulnerability Analysis
ICS	Incident Command System
IPAWS	Integrated Public Alert and Warning System
IPR	In-Process Review
IPT	Integrated Process Team
IPW	Improvement Planning Workshop
IRZ	Immediate Response Zone
ISP	Incident-Specific Plan

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JIC	Joint Information Center
JIS	Joint Information System
KY	Kentucky
KYEM	Kentucky Emergency Management
LCCE	Lifecycle Cost Estimate
LEP	Limited English Proficiency
LFUCG	Lexington-Fayette Urban County Government
MCR	Medical Capabilities Review
MEPP	Master Exercise Practitioner Program
MHz	Megahertz
MOU	Memorandum of Understanding
MQIT	Medical Quality Improvement Team
NIMS	National Incident Management System
NPAD	FEMA National Preparedness Assessment Division
PA IPT	CSEPP Public Affairs Integrated Process Team
PAPR	Powered Air Purifying Respirator
PAZ	Protective Action Zone
PCAPP	Pueblo Chemical Agent-Destruction Pilot Plant
PCD	Pueblo Chemical Depot
PDPHE	Pueblo Department of Public Health and Environment
PEO	Program Executive Office
PEO ACWA	Program Executive Office, Assembled Chemical Weapons Alternatives
PHC	U.S. Army Public Health Center
PIO	Public Information Officer
PPE	Personal Protective Equipment
PrepToolkit	FEMA Preparedness Toolkit
RCN	Risk Communications Network
REPP	Radiological Emergency Preparedness Program
RR	Resource Request
SCBA	Self-Contained Breathing Apparatus
SCWO	Supercritical Water Oxidation
SEOP	State Emergency Operations Plan
SMS	Short Message Service
SOP	Standard Operating Procedures
SPR	Stakeholder Preparedness Review
TEPW	Training and Exercise Planning Workshop
THIRA	Threat and Hazard Identification and Risk Assessment
U.S.C.	United States Code
USACE	U.S. Army Corps of Engineers



Homeland
Security