

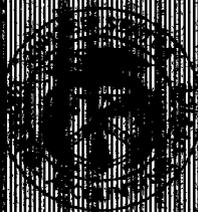
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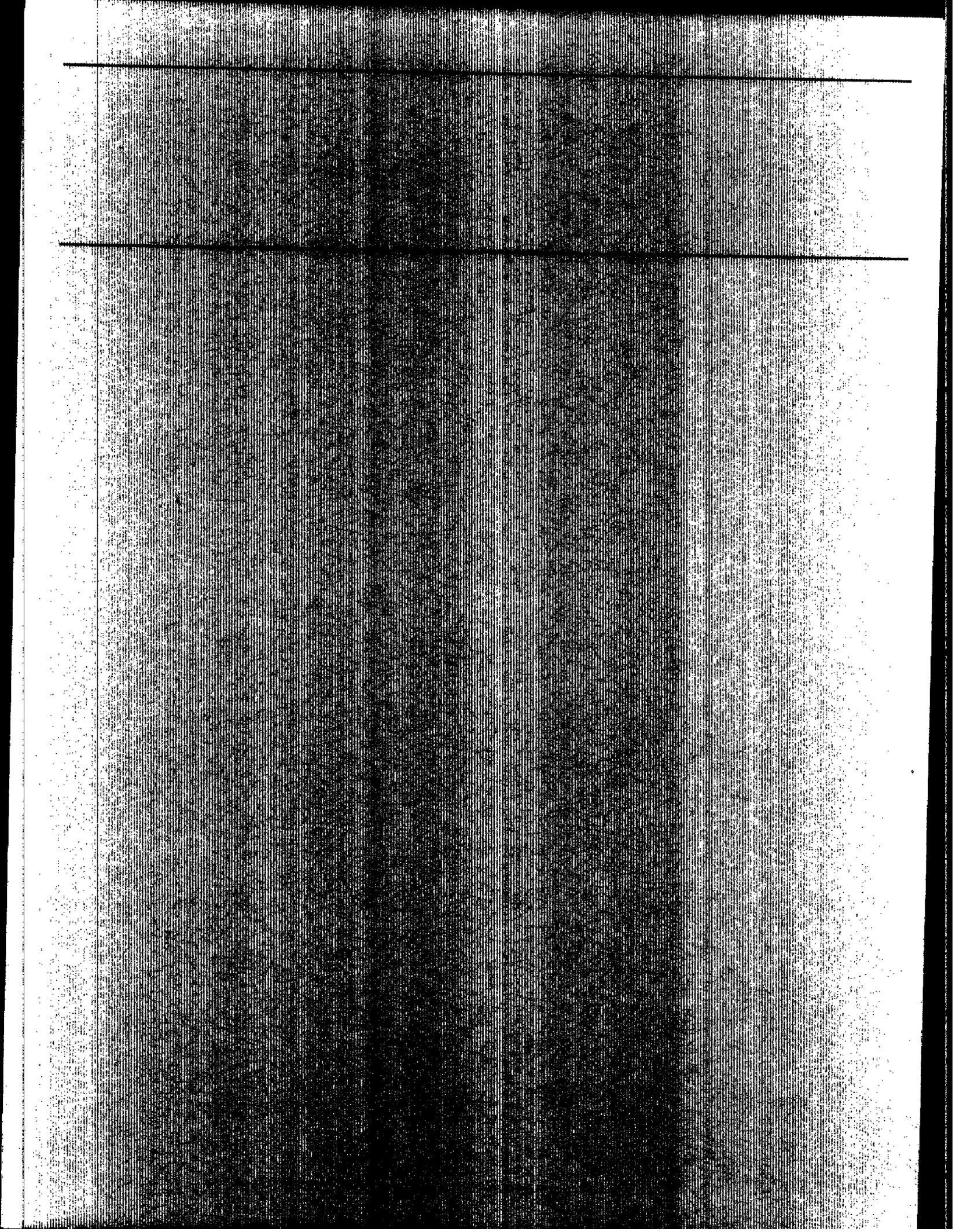
Report to the Chairman, Subcommittee
on Government, Energy, and Natural
Resources, Committee on Government
Operations, House of Representatives

February 1994

CHEMICAL WEAPON STOCKPILE

Army's Emergency Preparedness Program Has Been Slow to Achieve Results







United States
General Accounting Office
Washington, D.C. 20548

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National Security and
International Affairs Division

B-256012

February 22, 1994

The Honorable Mike Synar
Chairman, Subcommittee on Environment,
Energy, and Natural Resources
Committee on Government Operations
House of Representatives

Dear Mr. Chairman:

This report responds to your request that we review the Army's Chemical Stockpile Emergency Preparedness Program. The report discusses problems the program is having in helping to improve the emergency preparedness capabilities of communities near chemical weapon storage sites. It also proposes changes in program management to prevent additional schedule slippage. On July 16, 1993, we testified on our interim findings. This report presents the final results of our work.

Unless you publicly announce its contents earlier, we plan no further distribution of this report until 30 days after its issue date. At that time, we will send copies to the Chairmen of the House and Senate Committees on Armed Services and on Appropriations, the Secretaries of Defense and the Army, the Director of the Office of Management and Budget, and other interested parties. We will also make copies available to others upon request.

This report was prepared under the direction of Donna Heivilin, Director, Defense Management and NASA Issues, who may be reached on (202) 512-8412 if you or your staff have any questions. The major contributors to this report are listed in appendix III.

Sincerely yours,

Frank C. Conahan
Assistant Comptroller General

Executive Summary

Purpose

The accidental release of chemical agent from a chemical weapon storage site could pose a potentially lethal health hazard to persons living and working nearby. In 1988, the Army established the Chemical Stockpile Emergency Preparedness Program (CSEPP) to help local communities near such sites prepare to respond to such an emergency. The Chairman of the Subcommittee on Environment, Energy, and Natural Resources, House Committee on Government Operations, requested that GAO evaluate (1) the progress this program has made in developing the emergency preparedness capabilities of the local communities and (2) the effectiveness of CSEPP's management.

Background

In 1985, Congress directed the Department of Defense (DOD) to destroy its stockpile of obsolete chemical weapons and agents in a manner that provided maximum protection for the general public. The munitions to be destroyed contain nerve agents, which disrupt the nervous system and lead to loss of muscular control and death, as well as mustard agents, which blister the skin and can be lethal in large amounts. DOD assigned this task to the Army, which plans to build incinerators at the eight storage sites in the continental United States where most of these weapons are stored. The Army considers the likelihood of an accident during storage or destruction to be extremely small. However, the potential effects could be severe. More than 100,000 persons live or work within about 6 miles of the eight storage sites.

The Army established CSEPP to enhance the capabilities of local communities to respond to a chemical emergency. The Army sought assistance from the Federal Emergency Management Agency (FEMA) to provide federal emergency response funds and assistance to state and local emergency management agencies. Although FEMA and the Army provide financial and technical assistance to support local preparedness, state and local governments, in accordance with state law, are responsible for developing and implementing emergency response programs for the local communities. Ten states and 38 counties participate in the program. In 1988, the Army estimated that CSEPP would cost \$114 million and be completed by 1994.

Results in Brief

Although the Army has worked for 5 years and spent about \$200 million, communities near chemical weapon storage sites are not yet prepared to respond to a chemical emergency. The Army now estimates that CSEPP will cost \$696 million through its estimated completion date of 2003. The Army

has yet to fully identify the risks to civilian populations of a chemical accident in which agent crosses installation boundaries. As a result, communities lack guidance to help them prepare. Additionally, CSEPP has incurred delays in acquiring and installing essential equipment such as warning sirens and automated systems. CSEPP officials originally planned to complete the planning guidance and standards by September 1989. Although partial planning guidance has been issued, officials currently estimate that the guidance will not be completed until March 1994.

The program's management is complicated by the need to work with various state, local, and federal agency officials. However, the Army's overall management approach has not been effective. Specifically, its approach of sharing management responsibility for various activities such as training has resulted in unclear responsibility, uncoordinated activities, and at least until recently weak controls over funds. The conditions have contributed to delays in achieving program objectives.

Principal Findings

Insufficient Program Guidance Is Available

Communities are unable to complete their plans and preparations for responding to a chemical emergency because CSEPP has not completed all the guidance and standards they need. The remaining portions of this guidance will not be issued until the Army completes an analysis of the risk of chemical agent deposition beyond Army installation boundaries. The analysis has taken more than 2 years and is only now approaching completion. Guidance for 4 of CSEPP's 13 planning standards is on hold awaiting the outcome of the study.

Acquisition and Installation of Equipment Delayed

CSEPP planning documents identify requirements for sirens to alert surrounding communities, tone alert radios to provide instructions on what protective actions to take, computer automation to help local officials plan for evacuations, and sheltering in place for persons who, because of their proximity to the Army installation, will not have time to evacuate. However, the communities do not yet have the equipment needed to perform these tasks. CSEPP schedules show sirens and tone alert radios were to have been installed by October 1992, and system automation requirements completed by September 1991.

To date, sirens have been installed at only one site. CSEPP officials now estimate that all eight sites will have sirens by January 1995 and six sites will have tone alert radios by October 1995. An estimated date for installation of radios at the remaining two sites has not been determined.

Installation of the final computer automation system is not scheduled to be completed until July 1995. CSEPP officials state they will begin to assist communities with some sheltering-in-place enhancements during fiscal year 1994.

According to CSEPP officials, the delays are the result of unrealistic plans and schedules, and problems inherent in developing state-of-the-art systems.

Program Management Weaknesses Have Contributed to CSEPP Problems

Weaknesses in program management have contributed to the program delays. CSEPP's committee-based management structure lacks a clear focus of accountability and does not adequately support program coordination and execution. Responsibility for program decision-making and operational guidance is dispersed among the Joint Steering Committee and its six subcommittees, each of which is co-chaired by Army and FEMA representatives. In addition, there has been a high turnover in CSEPP leadership. Delays in CSEPP providing medical readiness training and automation can be attributed in large measure to the organizational structure.

In February 1993, the FEMA Inspector General reported that FEMA had not been providing the Army with adequate financial management information to evaluate program progress. FEMA and Army officials told GAO that recent actions have been taken to help resolve this problem. GAO is reviewing this issue separately.

Recommendations

GAO recommends that the Secretary of the Army determine the realism of existing milestones, resource needs, and barriers to achieving goals for each CSEPP initiative. Using this information, the Secretary should establish new baseline milestones for each initiative. GAO also recommends that the Secretary change CSEPP's committee structure to establish a single focal point of accountability within the Army to implement the program and to coordinate with other agencies as needed.

Agency Comments

As requested, GAO did not obtain official agency comments on a draft of this report. However, GAO discussed its findings with DOD, Army, and FEMA program officials, and they generally agreed. Their views have been included where appropriate.

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Abbreviations

CDC	Centers for Disease Control and Prevention
CSEPP	Chemical Stockpile Emergency Preparedness Program
DOD	Department of Defense
FEMA	Federal Emergency Management Agency
GAO	General Accounting Office

Introduction

The final Environmental Impact Statement for the Army's chemical weapon disposal program indicates that the likelihood of a chemical agent release during weapon storage or destruction is extremely small. However, the potential effects of such an accident are so severe that thorough preparation is necessary to respond in the event of an emergency. State and local governments are responsible for developing and implementing emergency response programs for the communities. In 1988, the Army established the Chemical Stockpile Emergency Preparedness Program (CSEPP) to help communities near chemical weapon storage and destruction sites improve their emergency response capability. While the Army has primary responsibility for the program, it shares portions of CSEPP's management with the Federal Emergency Management Agency (FEMA). The Army and FEMA provide financial and technical assistance to support local preparedness.

Chemical Weapons Stockpile

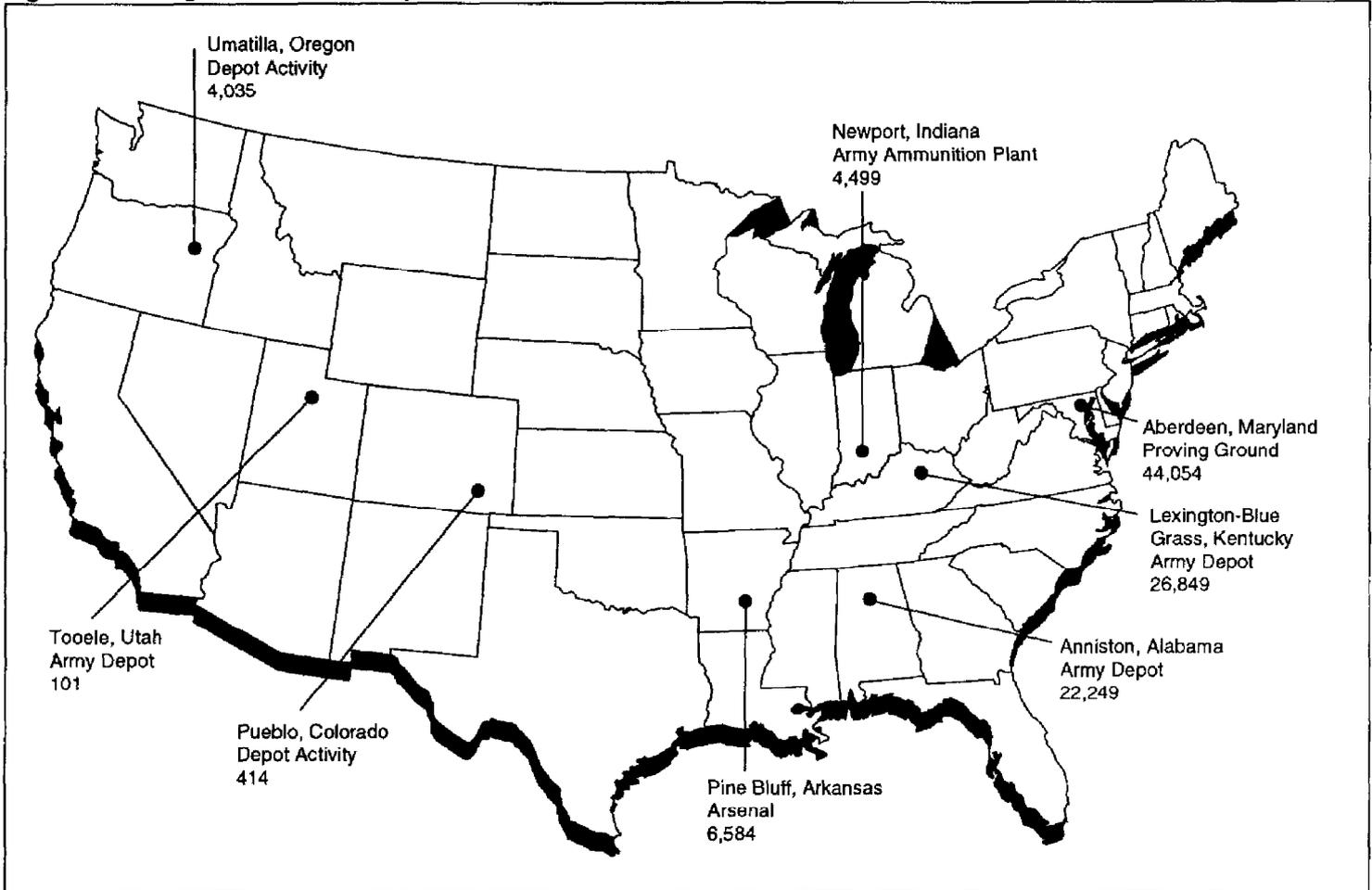
In November 1985, Congress directed the Department of Defense (DOD) to destroy the U.S. stockpile of obsolete chemical agents and munitions and also directed that the disposal program provide for the maximum protection of the environment, the general public, and the personnel involved in the actual destruction of the munitions.¹ The Army evaluated various techniques and, in 1988, selected on-site incineration as the method for destroying the chemical weapons.

Storage Locations

Most of the stockpile is stored at eight Army installations in the continental United States. The stockpile consists of nerve agents, which can disrupt the nervous system and lead to loss of muscular control and death, and mustard agents, which blister the skin and can be lethal in large amounts. More than 100,000 people live or work within about 6 miles of these sites. As figure 1.1 shows, the size of populations near storage locations ranges from about 100 persons near Tooele Army Depot in Utah to more than 44,000 persons near Aberdeen Proving Ground in Maryland.

¹Public Law 99-145.

Figure 1.1: Storage Locations and Population Within 6.2 Miles of Incineration Plants



Note: The 6.2 miles roughly correspond to the area having less than 1 hour to respond to a chemical agent release. This area, called an Immediate Response Zone, varies by site.

Army Planning

Communities near the chemical weapon storage sites had little capability to respond to a chemical emergency when CSEPP funding began in 1988. Originally, the Army scheduled emergency preparedness improvements to support the beginning of weapons destruction at each site. However, a 1988 Army study indicated that although the probability of a release was very small, weapons storage posed a greater threat of a major accidental chemical agent release than did weapons destruction. As a result, the Army decided to provide emergency response capability as soon as possible at all sites, regardless of the schedule for weapons destruction.

Program Objectives and Responsibilities

CSEPP's overall objectives are to provide guidance, assistance, a variety of equipment, and training so that communities can adequately respond to a chemical emergency. In August 1988, the Army signed a memorandum of understanding with FEMA to obtain FEMA's assistance in administering CSEPP in the states and counties. The Army asked for FEMA's assistance because FEMA is the federal agency responsible for working with state and local governments in developing and implementing preparedness programs, and because it has the infrastructure and experience to work with the states and counties. Under the agreement the Army is responsible for

- providing technical assistance and resources in developing emergency response plans and related capabilities,
- integrating the military installation and civilian community planning processes,
- ensuring that all emergency plans are adequate and can be readily implemented,
- conducting site-specific hazard analyses for planning, and
- providing assistance if the required response is beyond the capability of state and local governments.

FEMA is responsible for

- administering CSEPP funding provided to the states and localities;
- taking the lead in working with state and local governments to develop their emergency preparedness plans, upgrading community response capabilities, and conducting necessary training;
- taking the lead in preparing, developing, and delivering training on chemical materials emergency management, planning, mitigation, and response techniques to state and local governments; and
- taking the lead in developing public information and education programs.

To manage CSEPP, the Army and FEMA established a CSEPP steering committee and six subcommittees organized by functional area: planning, exercises, training, public affairs, reentry and restoration, and automation.

States and Counties Affected

Ten states and 38 counties participate in CSEPP. Ten states are involved because two of the storage sites—Umatilla, Oregon, and Newport, Indiana—are close to state boundaries. Consequently, the neighboring states of Washington and Illinois participate in CSEPP. See appendix I for a listing of the states and counties that participate.

Program Funding

In March 1988, the Army estimated that CSEPP would cost \$114 million through its then estimated completion date of 1994. This estimate has since been revised to approximately \$696 million through 2003, the current estimated completion date. The revised estimate is an increase of \$582 million over the Army's original 1988 estimate. Program officials state that program delays beyond 2003 will result in additional costs.

CSEPP had spent approximately \$200 million through fiscal year 1993. Funding for localities flows from the Army through FEMA to states and counties. Data provided by the Army and FEMA show that approximately \$71 million had been spent by the Army, \$29 million by FEMA, and about \$100 million by the 10 states participating in CSEPP. Specific purposes for which funds were released to states are shown in table 1.1.

Table 1.1: Allocation of CSEPP Funds Released to Participating States

Dollars in millions	
Funding category	
Communications	\$22.8
Alert and notification devices	23.9
Automation	13.0
Emergency operations centers	9.9
State and local salaries and benefits	12.4
Other, including administration and travel	17.9
Total	\$99.9

Objectives, Scope, and Methodology

The Chairman of the Subcommittee on Environment, Energy, and Natural Resources, House Committee on Government Operations, asked us to (1) determine if progress has been made in preparing civilian communities to respond to potential emergencies associated with the storage or disposal of chemical weapons and (2) examine the effectiveness of CSEPP's management. We provided an interim assessment of this program in July 1993, and this report presents the final results of our work.²

We obtained information from FEMA and the Department of the Army in Washington, D.C., on CSEPP policy, procedures, milestones, and status. We also visited five CSEPP sites—Anniston, Alabama; Pine Bluff, Arkansas; Pueblo, Colorado; Tooele, Utah; and Umatilla, Oregon—to obtain information on local response capabilities from state and local CSEPP

²Chemical Weapons Storage: Communities Are Not Prepared to Respond to Emergencies (GAO/T-NSIAD-93-18, July 16, 1993).

planners, trainers, and response personnel. Appendix II contains a list of entities contacted during our work.

To evaluate program progress, we attended CSEPP planning, medical, and automation conferences, as well as a quarterly regional conference and a CSEPP annual conference. At the five sites, we reviewed the status of preparations and equipment acquisition; visited chemical weapon storage areas and response facilities; and observed emergency response exercises. During the exercises, we observed response activities at medical and emergency operations facilities. Following the exercises, we attended sessions at which Army, FEMA, and contractor personnel evaluated the participants' emergency response efforts and other sessions at which they provided feedback to exercise participants.

We performed our work between June 1992 and September 1993 in accordance with generally accepted government auditing standards. As requested, we did not obtain official agency comments on a draft of this report. However, we discussed our findings with DOD, Army, and FEMA program officials, and they generally agreed. Their views have been included where appropriate.

Communities Are Not Fully Prepared to Respond to a Chemical Emergency

Although the Army has worked for 5 years and spent about \$200 million to help prepare CSEPP communities to respond to a chemical accident, communities near the storage sites are not yet fully prepared for such an emergency. The communities are unable to complete their plans and preparations because CSEPP has not fully identified the risks of an accidental release to nearby communities. As a result, communities lack the guidance and standards they need for such key areas as protective equipment, decontamination, and medical response. Furthermore, the acquisition and installation of necessary equipment, such as alert and notification devices and automation systems, have not been completed.

Analysis of Off-Post Risk Delays Needed Guidance

Local emergency preparedness officials lack complete planning guidance to help them prepare for a chemical accident. The Army originally planned to provide the communities with complete planning guidance and standards by September 1989. However, when the guidance manual was issued in April 1993, only about half of the standards that support the planning guidance were included. Officials state that the guidance and standards cannot be completed until the Army has completed its analysis of the risk of chemical agent deposition beyond installation boundaries.

Planning Guidance Has Been Delayed

CSEPP officials originally expected to complete their planning guidance in the form of a manual containing planning checklists, supplemented by 13 planning standards, by September 1989. This manual was meant to provide broad guidance and direction to local and state officials in the development and maintenance of coordinated emergency plans for accidents involving military chemical agents. In May 1990, we reported that the Army was behind schedule in developing the planning guidance but that it anticipated having portions completed by late spring 1990 and the entire document completed by the end of fiscal year 1990.¹ We recommended that the Army take action to ensure the timely completion of the guidance. In September 1990, the Assistant Secretary of the Army stated that the Army concurred with this recommendation and that through intensive management and the personal interaction of its staff, the Army would ensure that these actions would be completed in a timely manner.

However, only 7 of the 13 planning standards were completed as of April 1993, when the guidance was adopted for use in CSEPP and issued as

¹Chemical Weapons: Obstacles to the Army's Plan to Destroy Obsolete U.S. Stockpile (GAO/NSIAD-90-155, May 24, 1990).

final by the CSEPP Joint Steering Committee. The seven completed planning standards cover command and control, emergency operations centers, communications support networks, public alert and notification systems, traffic and access control, public education and information, and evacuee support. Of the other six standards, two—covering protective action decision-making and protective actions and response—were issued in September 1993. The four remaining standards, covering emergency worker operations, emergency medical services, decontamination, and reentry, will not be issued until the Army completes its study assessing the risk of chemical agent deposition beyond installation boundaries. Army officials estimated that they would be able to complete the remaining standards by March 1994.

Response Plans and Procedures Are Incomplete

Officials in many of the CSEPP counties and states we visited said that because of the lack of guidance and standards, they are unable to complete their emergency response plans. For example, officials at several locations cited problems in completing plans because there were no standards on decontamination, protective gear for emergency response workers, or medical response. Local officials strongly believe that in a chemical emergency they will need to decontaminate people who are suspected of having been exposed to the chemical agent prior to treating them. Similarly, they believe that protective gear is needed for civilian emergency workers who have a role in treating casualties, directing traffic during an evacuation, and performing other emergency response functions to ensure that they are protected from exposure to chemical agent.

Decontamination consists of eliminating all suspected sources of contamination, such as clothing, and treating the person with an appropriate solution. It may be performed at the scene of the accident, at decontamination stations prior to admission to the hospital, and at the hospital emergency room. Protective gear consists of clothing for skin protection and masks for respiratory protection. However, until CSEPP finalizes guidance and standards on these issues, local officials cannot procure the necessary equipment, design response procedures, or complete the training needed to develop the confidence necessary to do the job. These are fundamental steps that must be accomplished before an effective emergency response plan can be developed. For example, officials in Benton County, Washington, and Salt Lake County, Utah, told us that some hospitals and ambulance companies in their communities were unable to be fully incorporated into CSEPP or to provide support

during emergency response exercises because of the lack of guidance and resources needed to perform decontamination.

Officials are also concerned about the lack of guidance and assistance, such as planning, training, and coordination, in developing a medical response to a chemical emergency. While CSEPP is not responsible for providing medical resources to CSEPP communities, it is responsible for providing related guidance and assistance. Local officials cited inadequate resources, lack of guidance on and equipment for decontamination and protective gear, difficulties enlisting the support of neighboring communities, and inadequate training of medical emergency responders as some of the factors hindering local medical readiness.

Some CSEPP communities have stated that they do not have the hospital capability to deal with large numbers of casualties during a chemical emergency. For example, Tooele County, Utah, officials have stated that the county has limited capability to handle mass injuries from a chemical accident. Like many CSEPP counties, Tooele has sought support from hospitals in a neighboring county, but this support is threatened by concern about the possibility of spreading contamination if persons exposed to toxic agents are allowed into local facilities. Further, Indiana officials have stated that medical resources are scarce near the Newport Army Ammunition Plant. There is only one local medical facility, and the next closest hospital is about 30 miles away.

Our review also shows that some hospitals and other medical care providers do not have adequate supplies of antidote should an accident of any magnitude occur. For example, during an emergency preparedness exercise at Tooele, the depot's supply of antidote was found to be out of date. CSEPP officials recognize the existence of these problems and stated that CSEPP funding would be provided during fiscal year 1994 for antidote and decontamination equipment at some sites to improve their medical preparedness.

Acquisition and Installation of Essential Equipment Is Behind Schedule

In areas where guidance and standards have been provided, CSEPP has not provided timely support and resources for implementation. Action on identified needs for (1) alert and notification devices, (2) automated systems to assist in protective action and evacuation planning, and (3) sheltering in place is behind schedule.

Alert and Notification Devices

In a chemical emergency, the surrounding community must be alerted and protective actions must be taken, often within minutes. Sirens and tone alert radios can quickly alert officials, emergency response workers, and residents and tell them what protective actions to take. Initially, CSEPP planned that alert and notification equipment would be installed and tested at all locations by October 1992. Yet, only one site, Anniston, Alabama, had sirens installed by the end of 1993. CSEPP officials anticipate that sirens will be in place at all eight sites by January 1995, and that tone alert radios will be installed at six sites by October 1995. The installation date for the remaining two sites, Pine Bluff, Arkansas, and Pueblo, Colorado, has yet to be determined.

Delays in acquiring and fielding sirens and tone alert radios have occurred for several reasons. First, disputes between some counties and the state or FEMA over the numbers and placement of the sirens have disrupted attempts to field alert and notification equipment. In March 1993, for example, Tooele County, Utah, refused to participate in a major CSEPP exercise until high-level CSEPP officials addressed an impasse with FEMA regarding the number of sirens to be located in the county. Further, CSEPP officials said that the 1990 milestone for installing alert and notification equipment was overly optimistic and did not consider either the time required to build consensus among the many program participants or the complexity of building a state-of-the-art notification system. They also noted the need to explore and resolve privacy issues before tone alert radios can be installed in private homes. However, while privacy may be a valid concern, radios could have been made quickly available to those residents who wanted them and were willing to use them.

Automated Planning System

CSEPP is acquiring automation—computer hardware and software—to support (1) planning and managing emergency response activities and (2) calculating, for planning purposes, the dispersion pattern of released chemical agent. The process of determining appropriate protective actions is considered too complex and time-consuming to be performed at the time of an emergency. Thus, automated equipment is considered to be essential in helping local officials determine in advance the protective actions appropriate for a range of emergencies. CSEPP officials estimated in March 1990 that final requirements for the automated systems would be completed by September 1991. An interim system had been installed in six states by August 1993, and installation of the final automation system is scheduled to be completed by July 1995.

The program officials have been working to overcome limitations in the system's atmospheric diffusion model to project the path of released chemical agent. The projection model has several known technical limitations, including the lack of sophisticated terrain and meteorological data in calculating dispersion and the lack of reliability in projecting dispersion at slow wind speeds or beyond 12 miles from the source of a chemical release. CSEPP has approved funding to refine the site-specific dispersion calculations in this automated planning tool.

Sheltering-in-Place Assistance

CSEPP documents state that people closest to most storage sites will not have time to evacuate and will have to remain in place in the event of an accidental chemical release, yet until late in fiscal year 1993 CSEPP did not provide support to communities to develop sheltering in place. Sheltering-in-place enhancements can be as simple as taping doors and windows or as elaborate as installing pressurization systems in some schools and hospitals.

While evacuation of persons endangered by a chemical release is always preferable to sheltering in place, there may be instances where there would not be enough time to evacuate. For example, 34 schools are located within 9 miles of Pine Bluff Arsenal, and the closest dwellings are only about half a mile from the bunkers containing chemical agent. According to local officials, it is feasible that released chemical agent could pass the installation boundary within 5 minutes. Likewise, officials of Morrow and Umatilla counties in Oregon said that they would not have time to evacuate many residents because of a combination of proximity to the depot, lack of notification and alert equipment, and lack of transportation. During an exercise at Tooele, Utah, county officials chose to tell residents nearest the Army installation to stay inside rather than to evacuate because of insufficient time and means to evacuate.

CSEPP officials agree that sheltering-in-place assistance will be needed in all CSEPP communities, but acknowledge that administering the assistance is difficult. Even though local officials may want the assistance, senior CSEPP officials are concerned about overstating the threat, panicking citizens, and possibly lowering local real estate values. They also cite concerns about controls to ensure houses are properly sealed and about how people would respond to a shelter-in-place order. Nonetheless, CSEPP officials said they recently made the decision to fund sheltering-in-place studies at two sites.

Conclusions

Communities near chemical weapon storage sites are not yet prepared to respond to a chemical accident. Although CSEPP was created to provide equipment, guidance, and assistance to those communities, progress in achieving program objectives has been slow. In particular, guidance has been delayed in several areas because a risk assessment has not been completed.

Recommendation

We recommend that the Secretary of the Army determine the realism of existing milestones, resource needs, and barriers to achieving goals for each CSEPP initiative. Using this information, the Secretary should establish new baseline milestones for each initiative and require periodic progress reviews by the Army official designated with responsibility for the program.

Management Weaknesses Contribute to the Program's Slow Progress

The overall management challenge associated with CSEPP is complex and difficult, requiring interaction with state and local governments and various federal agencies. While this environment has contributed to program implementation delays, CSEPP's management weaknesses have also significantly contributed. More specifically, CSEPP's management structure lacks a clear focus of accountability and has hampered timely and effective program implementation.

The FEMA Inspector General reported in February 1993 that there was a lack of accountability over program funds released to the states. CSEPP and Army officials told us that changes had been made in late fiscal year 1993 to resolve the program's financial management information problem. We are reviewing this separately.

CSEPP Management Structure

Although the Army is legislatively responsible for CSEPP, responsibility for program decision-making and operational guidance is dispersed among the Joint Steering Committee and its six subcommittees. The Joint Steering Committee, co-chaired by Army and FEMA representatives, sets overall policy. The subcommittees, composed of Army, FEMA, and other agency representatives, collect and analyze information and develop alternatives in their area of responsibility. The management of individual activities may be delegated to different entities, such as FEMA's Training Management Team.

Management Structure Is Ineffective

In September 1990, the Army stated that through intensive management it would ensure the timely completion of emergency preparedness plans, guidelines, studies, and manuals, as well as the acquisition and installation of equipment. However, as discussed in chapter 2, these problems have persisted. This has occurred in large measure because of a lack of management accountability for carrying out the program, meeting program goals, and controlling activities. In addition, there has been a lack of continuity in the CSEPP leadership, which may have also contributed to these problems. CSEPP's experience with automation and medical readiness training illustrates these problems.

Automation Initiative

CSEPP originally planned to have its final automation system requirements identified by September 1991. However, the requirements were not finalized until July 1993. According to an Army official now responsible for automation, some of the problem is attributable to CSEPP's subcommittee

structure. CSEPP's automation system must support each subcommittee's specific automation needs. However, co-chairs responsible for identifying their area's automation needs would sometimes not attend key automation subcommittee meetings. Additionally, there were disagreements between the Army and FEMA over system design and acquisition.

To resolve these problems, in November 1992, the Army took over leadership of the automation subcommittee and most of its acquisition efforts. The Army expects that this action will consolidate and improve automation management.

Medical Readiness Training

FEMA was designated lead agency for training and established a Training Management Team to assess training needs, conduct interim training, and develop a training plan and training materials. However, the Army also asked the Centers for Disease Control and Prevention (CDC) to provide training in the treatment of agent casualties. CDC surveyed physicians, nurses, and emergency medical technicians and then designed and presented courses. At the same time, FEMA and some communities felt a need to also train emergency medical technicians in management of chemical casualties. Because of the overlap, FEMA and CDC agreed that FEMA would be responsible for training emergency medical technicians and CDC would assume responsibility for training physicians, physician's assistants, nurses, nurse practitioners, and other state licensed personnel.

This fragmentation of training responsibilities, however, proved ineffective. For example, one official stated that "the current program has not worked, having one group perform training for physicians, nurses, and hospital personnel while another group develops programs for pre-hospital and first response personnel." Similarly, local emergency management officials in four other states indicated that CSEPP training is fragmented and could be better coordinated to improve effectiveness. In April 1993, a senior CDC official stated that CSEPP lacked a clearly defined lead agency among the federal organizations involved, the training process was fragmented among the participants, and emergency medical training suffered from a lack of financial resources. CDC concluded that its continued participation in CSEPP was counterproductive and withdrew from the program.

Subcommittee Leadership Lacks Continuity

The leadership of the subcommittees lacks continuity, and until recently, the subcommittees lacked a mechanism for regularly communicating

among one another. Each subcommittee is co-chaired by representatives from the Army and FEMA, and some co-chairs have changed frequently. For example, in the 7 months preceding September 1993, six of the subcommittees had one or more changes in leadership, including three changes in leadership on the planning subcommittee alone. Additionally, not until the spring of 1993 did all CSEPP co-chairs begin holding combined monthly meetings as a means of promoting communication across subcommittee boundaries.

Actions to Correct Financial Information Weaknesses Have Been Taken

CSEPP funds provided to the states are covered by the Uniform Administrative Requirements for Grants and Cooperative Agreements to State and Local Governments (41 C.F.R., chapter 1, parts 13 and 14). Grant accounting procedures, however, do not provide adequate information for program management. Thus, FEMA was unable to provide the Army full and adequate financial data on which to base program management and associated decisions. To illustrate, in its February 1993 report, FEMA's Inspector General stated that the financial reporting system did not provide timely, accurate, or consistent data and did not satisfy the management needs of either FEMA or the Army. Specifically, although FEMA has administered 70 percent of the allocated CSEPP funds—\$130 million out of a total of \$200 million—it could not accurately account for how funds were spent. Instead, FEMA managers could provide only the amounts originally designated for a particular purpose.

In a follow-up memo in September 1993, FEMA's Inspector General reported that steps were being taken to resolve the financial information problems. According to the memo, a senior FEMA official had been made responsible for monitoring financial reports, and reporting procedures had been modified to provide the financial information the Army required. In December 1993, an Army official stated that the Army and FEMA were working to improve FEMA's financial information reporting. We did not review the actions taken by FEMA or assess the effectiveness of these actions. We have, however, begun a separate review of CSEPP's use of funds, at the request of the Subcommittee.

Conclusions

Effective implementation of CSEPP requires close working relationships among state, local, and various federal agencies. The current CSEPP committee structure attempted to address this need. However, the approach has not resulted in the timely implementation of goals and objectives. The Army, since 1991, has acknowledged the need to make

Chapter 3
Management Weaknesses Contribute to the
Program's Slow Progress

management improvements. However, accountability for specific activities remains fragmented, activities are not always well coordinated, and key management information at least until recently had been lacking. Taken together, these conditions have contributed significantly to delays in implementing program objectives and specific activities. Given these conditions, fundamental changes to the program's management approach are needed.

Recommendation

We recommend that the Secretary of the Army change CSEPP's committee structure to establish a single focal point of accountability within the Army to implement the program and to coordinate with FEMA and other agencies as needed.

States and Counties Participating in CSEPP

State	County
Alabama ^a	Calhoun ^a Clay ^a Cleburne Etowah St. Clair Talladega ^a
Arkansas ^a	Arkansas Cleveland Dallas ^a Grant ^a Jefferson ^a Lincoln Lonoke Prairie Pulaski Saline
Colorado ^a	Pueblo ^a
Illinois	Edgar Vermillion
Indiana	Fountain Parke Vermillion
Kentucky	Clark Estill Fayette Garrard Madison Powell
Maryland	Harford Baltimore Kent
Oregon ^a	Gilliam Morrow ^a Umatilla ^a
Utah ^a	Salt Lake ^a Tooele ^a Utah ^a
Washington ^a	Benton ^a

^aStates and counties visited during our review.

Sites and Agencies Included in Our Review

Entities that we contacted during our work included the following:

- Office of the Program Manager for Chemical Demilitarization, Aberdeen, Maryland;
- Assistant Secretary of the Army for Installations, Logistics, and the Environment, Pentagon, Washington, D.C.;
- U.S. Army Nuclear and Chemical Agency; Springfield, Virginia;
- U.S. Army Defense Ammunition Center and School, Savannah, Illinois;
- Edgewood Research, Development, and Engineering Center, Aberdeen, Maryland;
- Federal Emergency Management Agency (FEMA) headquarters and FEMA Regions IV, VIII, and X;
- Anniston, Pine Bluff, Pueblo, Tooele, and Umatilla installations where the chemical weapons are stored and where demilitarization facilities will be located;
- states, counties, and local entities associated with the Anniston, Pine Bluff, Pueblo, Tooele, and Umatilla installations;
- contractors, including Oak Ridge National Laboratories, Oak Ridge, Tennessee;
- Centers for Disease Control and Prevention, Atlanta, Georgia;
- Chemical Stockpile Emergency Preparedness Program (joint Army-FEMA) Steering Committee and subcommittees; and
- Intergovernmental Consultation and Coordination Board (sponsored by the Program Manager for Chemical Demilitarization).

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Washington, D.C. 20548

Address Correction Requested