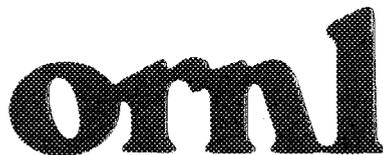




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**Implications of SARA Title III for
Community-Based Emergency
Planning in the U.S. Army Chemical
Stockpile Disposal Program:
The Acquisition of
Emergency Equipment**

David L. Feldman

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ENERGY DIVISION

IMPLICATIONS OF SARA TITLE III FOR
COMMUNITY-BASED EMERGENCY PLANNING
IN THE U.S. ARMY CHEMICAL STOCKPILE
DISPOSAL PROGRAM: THE ACQUISITION
OF EMERGENCY EQUIPMENT

David L. Feldman

Date Published—October 1990

Prepared for the
U.S. DEPARTMENT OF THE ARMY
under Interagency Agreement No. 1457-B106-A1

Prepared by the
OAK RIDGE NATIONAL LABORATORY
Oak Ridge, Tennessee 37831
operated by
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U.S. DEPARTMENT OF ENERGY
under Contract No. DE-AC05-84OR21400



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ABBREVIATIONS, ACRONYMS, AND INITIALISMS

ANAD	Anniston Army Depot, Alabama
CCA	Comprehensive Coordinated Agreements between individual states and FEMA
CONUS	continental United States
CSDP	Chemical Stockpile Disposal Program
CSEPP	Chemical Stockpile Emergency Preparedness Program
DA	U.S. Department of the Army
DOD	U.S. Department of Defense
EPA	Environmental Protection Agency
FEMA	U.S. Federal Emergency Management Agency
HAZ/MAT	hazardous materials
LBAD	Lexington-Blue Grass Army Depot, Kentucky
LEPC	Local Emergency Planning Committee (see SARA Title III)
MOU	Memorandum of Understanding
MSDS	Material Safety Data Sheets, required under SARA Title III
NAAP	Newport Army Ammunition Plant, Indiana
OSHA	U.S. Occupational Safety and Health Administration
OSHA-HC	The Occupational Safety and Health Administration's Hazardous Communication (labeling) standard
PBA	Pine Bluff Arsenal, Arkansas
Pub.L.	Public Law
PUDA	Pueblo Depot Activity, Colorado
RRT	Regional Response team

ABBREVIATIONS, ACRONYMS, AND INITIALISMS

SARA Title III	The Superfund Amendments and Reauthorization Act of 1986. SARA Title III refers to the Emergency Preparedness and Community Right to Know Act, which established LEPCs and SERCs
SERC	State Emergency Response Commission (see SARA Title III)
TEAD	Tooele Army Depot, Utah
UMDA	Umatilla Depot Activity, Oregon

ABSTRACT

This report examines the implications of SARA Title III for the acquisition of warning, notification, communications, and other equipment designed to provide effective emergency response for the U.S. Army's Chemical Stockpile Disposal Program (CSDP). Decisions on procurement of emergency equipment in the CSDP are made by local communities adjacent to chemical disposal facilities. Various federal agencies have a direct influence on this process. These agencies include the Department of Army, the Federal Emergency Management Agency (FEMA), and the Environmental Protection Agency (EPA).

The Army and FEMA are working together to provide funds for the upgrade of emergency response infrastructure through Comprehensive Cooperative Agreements negotiated with affected states. EPA, assigned an active role under SARA Title III to evaluate the effectiveness of warning systems for chemical emergencies, is also involved in this process through its oversight of Local Emergency Planning Committees (LEPCs). Some of the EPA staff believe that LEPCs should play a role in ascertaining equipment needs and participating in other warning system issues, such as alert decision making.

Two models of equipment acquisition and procurement in the CSDP have emerged. The first, put forth by FEMA and the Department of the Army, views the appropriate role of federal agencies as providing guidance to local emergency managers in the acquisition of warning, notification, and communications equipment. In addition, CSDP emergency planning is viewed as a variant of other disaster preparedness efforts by local government. Time and resources devoted to preparedness will enhance the ability of local communities to respond to several types of emergencies. Thus, hazardous materials plans can be appended to established local multihazards plans, if so desired.

A second view, put forth by EPA, contends that LEPCs, established under SARA Title III for the purpose of overseeing development of chemical emergency planning, collecting information on chemical hazards, and evaluating available resources for emergency response, should become the focal point of community-based efforts to acquire warning systems and other emergency equipment. Furthermore, chemical emergency planning should be linked to LEPC efforts to systematize information on chemical facility hazards.

Four aspects of these contending views are examined: (1) the capabilities and limitations of LEPCs for emergency equipment procurement, (2) the impact of tort liability on procurement decision making by LEPC members and state and local emergency managers, (3) the cohesiveness of established procurement and planning networks within states and communities affected by the CSDP, and (4) the differing programmatic goals of EPA and the CSDP (Federal Emergency Management Agency/Department of the Army) relative to community-based emergency planning. Methods of reconciling these contending approaches are suggested.

The report concludes that, although all levels of government are involved in emergency preparedness decisions for the CSDP, the most effective decisions are community based and responsive to local needs, characteristics, infrastructure, and resources. Thus, EPA and FEMA should make every effort to rely on established procurement systems for the acquisition of emergency equipment while involving LEPCs in areas of consultation and advice appropriate to their capabilities. Such areas of advice could include urging regional coordination in ascertaining equipment needs so as to ensure

consistency and functional equivalency among CSDP sites as regards communications, warning, and other emergency systems.

1. INTRODUCTION: SARA TITLE III, THE CHEMICAL STOCKPILE DISPOSAL PROGRAM, AND EMERGENCY EQUIPMENT ACQUISITION

The acquisition of equipment for alert and notification, communication, and other emergency systems is an essential component of effective community-based emergency planning in the U.S. Army Chemical Stockpile Disposal Program (CSDP) [U.S. Department of the Army (DA) 1988a]. This report examines the implications of Public Law (Pub.L.) 99-499 (1986), The Superfund Amendments and Reauthorization Act of 1986 (SARA Title III), for this acquisition process.

Two principal models of community-based emergency planning, relevant for equipment procurement, have emerged in the CSDP. The first, articulated by the U.S. Department of the Army (DA) and the U.S. Federal Emergency Management Agency (FEMA), affirms that the appropriate responsibility of federal agencies is to provide guidance and direction to local emergency managers for the acquisition of warning, notification, communications, command and control, and other equipment. This view is contained in a Memorandum of Understanding (MOU) that divides responsibilities for technical assistance and the upgrade of emergency response infrastructure at CSDP continental United States (CONUS) sites among DA and FEMA.

This MOU places the major responsibility for equipment acquisition on states which, working with local governments, exercise discretion in procurement (DA 1988b). In addition, an emergency preparedness guidance plan, provided to local communities and states by a CSDP subcontractor, also recommends local flexibility in emergency preparedness decision making to mesh community resources, capabilities, and needs in planning and acquisition (Schneider Engineering, Inc. 1989a). Various administrative options for procurement—ranging from DA, command level, or FEMA purchase to pass-through funding to states and local communities—exist to promote this flexibility (Schneider Engineering, Inc. 1989b).

The passage of SARA Title III, empowering the Environmental Protection Agency (EPA) to review the effectiveness of warning systems for all chemical emergencies in the United States [Pub.L. 99-499 (1986), Sect. 305b)], has generated a second model of equipment acquisition. In the EPA view, Local Emergency Planning Committees (LEPCs), which oversee development of chemical emergency plans, collect information on potential hazards, and evaluate available resources for emergency response, should become focal points for acquisition of warning systems. This model also set forth that CSDP emergency planning be closely linked to the organizational structure of the National Response System under SARA Title III, thus ensuring that all chemical facility emergency planning is coordinated with political jurisdictions beyond the immediate locality of a chemical accident. This is how it differs from the first model. In the event that LEPCs are unable to manage these emergency preparedness issues, the DA and FEMA are advised to work through State Emergency Response Commissions (SERCs) to ensure that knowledgeable public officials and relevant emergency-services personnel are appointed to LEPCs (Makris 1988).

Two other models have been under consideration for equipment procurement in the CSDP. Essentially, these models encompass either direct procurement of emergency equipment by the DA and/or CSDP installations and subsequent transfer to local communities or discretionary funding to local governments by FEMA (Schneider Engineering, Inc. 1989c). Both of these strategies are variations of the first two models.

Moreover, each entails numerous regulatory and bureaucratic problems that would probably obviate their selection. Thus, this report focuses only on the former models.

1.1 STRUCTURE OF THIS REPORT

The remainder of Sect. 1 provides an overview and summary of the impact of SARA Title III on emergency equipment acquisition issues. Section 2 compares the EPA and CSDP models of community-based emergency planning. Section 3 examines the relationship between SARA Title III and equipment acquisition issues in states in which CSDP facilities are located and adjoining states. Tort liability among state and local emergency managers and SARA Title III institutions is discussed in Sect. 4, and the advantages and disadvantages of employing established political institutions for equipment acquisition are the subject of Sect. 5. Section 6 discusses ways of integrating the CSDP and EPA models, as well as likely developments in SARA Title III implementation that may affect equipment acquisition.

1.2 SUMMARY AND RECOMMENDATIONS

SARA Title III has transformed the process of emergency equipment acquisition in the CSDP into a more complex relationship than originally foreseen for two reasons:

- Section 305(b) of SARA Title III gives EPA authority to review the adequacy of emergency systems for monitoring, detecting, and preventing accidents at chemical facilities (EPA 1988a).
- As the primary implementing agency for SARA Title III, EPA can interpret ambiguous areas of the law (EPA 1988b). EPA has expressed the opinion that LEPCs should become a focal point for emergency response planning.

Under EPA's "focal point" interpretation, some within EPA contend that acquisition of emergency equipment should be included in LEPC decision making (Makris 1988). This approach may be termed the EPA or SARA Title III model of community-based emergency planning.

The CSDP model of community-based emergency planning, exemplified by the joint efforts of DA and FEMA, suggests that cooperative and coordinated programs should be conducted by these agencies in the areas of (1) providing technical assistance to develop and implement response plans and (2) working with states and localities to upgrade emergency preparedness. These programs would promote effective response in the event of chemical accidents and would smooth the adaptation of existing warning and notification systems to the needs of the CSDP. Resolution of differences between these approaches is important for local communities in order to alleviate confusion in procurement decision making. Efforts to resolve differences between the two models should focus on the following issues:

- If SARA Title III institutions, particularly LEPCs, assume responsibility for emergency equipment acquisition, they must divide their attention between this task and two additional tasks: (1) gathering and disseminating chemical facility hazards information under the right-to-know provisions of SARA Title III [Pub.L. 99-499 (1986),

Sects. 311, 312] and (2) developing response plans for emergency-planning districts of varying character. Many LEPCs are currently overwhelmed by these latter two responsibilities (BNA 1988a).

- LEPC participants may be liable for damages accruing from decisions made through the SARA Title III process. If LEPCs make emergency equipment acquisition decisions in the absence of clear immunity from liability, decisions may be based on a wish to avoid civil suits rather than a broader view of equipment needs (BNA 1988b; BNA 1988c). The status of immunity from civil suits for personnel of established government agencies is also open to question in some states in which CSDP facilities are located and adjoining states, such as Colorado, Illinois, and Utah (see Sect. 4.2). Thus, liability is an important factor in procurement-related decisions, regardless of the role of SARA Title III institutions in this acquisition process.
- Warning system effectiveness is contingent on such factors as defining procedures clearly, knowing with whom to communicate, and having a cohesive response network (Sorensen et al. 1988). These factors are more likely to be in place in an established political jurisdiction, such as a county or city government or emergency management agency with established decision-making systems for capital expenditures.
- Differing programmatic goals within the EPA and CSDP models of community-based planning may cause confusion in local communities regarding equipment needs. In many states in which CSDP facilities are located and adjoining states, LEPC chairpersons are elected county judges, commissioners, or executives. As a result, distribution of resources, equipment, or staff to LEPCs is likely to fall within the jurisdiction of established political institutions. Thus, efforts should be made to avoid pitting the EPA and CSDP models of equipment acquisition against one another.

Integration of the EPA and CSDP approaches, while difficult, can be accomplished on several levels. In some cases (in Colorado and Utah, for example), LEPCs vigorously participated in acquisition-related decisions (see Sect. 3.1.5). In other instances, established local emergency management agencies have proven to be better qualified to make such decisions.

While significant policy differences among federal agencies are to be expected, regional FEMA and EPA officials responsible for emergency-planning decision making in the CSDP agree on three issues pertinent to the role of SARA Title III institutions in procurement:

- Information and outreach to LEPCs by local emergency managers in the process of equipment acquisition may be a valuable mechanism for gaining community support for CSDP procurement decisions and ensuring immunity from liability. In the latter instance, if it is shown that decisions were fully reviewed by all relevant political constituencies, then compliance with federal and state laws is more easily demonstrated, and thus immunity from civil suit is more likely (Pine 1989).
- Reliance on established procurement systems is an effective means of ensuring consistency with planning for other chemical hazards, avoiding duplicative effort, and ensuring timely equipment acquisition.
- Consulting with LEPCs on procurement decisions may help heighten public awareness of general warning, notification, and communication issues in the CSDP. Consultation may educate the public on the need for effective emergency systems.

Acquisition of computers and facsimile machines, communication upgrades, and the purchase of emergency management computer software have taken place. At this time, alert and notification and communication studies have been completed or are under way at all sites. A plethora of equipment has been requested for FY 91 Comprehensive Cooperative Agreement (CCA) applications. The LEPCs in Madison County, Kentucky, have not become involved in the planning or acquisition process but are being informed regularly on current Chemical Stockpile Emergency Preparedness Program (CSEPP) information by state and local planners.

2. ALTERNATIVE PROGRAMMATIC APPROACHES: CSDP AND EPA MODELS OF COMMUNITY-BASED EMERGENCY PLANNING AND IMPLICATIONS

In a report to the U.S. Congress, required by Section 305(b) of SARA Title III, EPA concluded that few American communities possess state-of-the-art hardware for warning and notification in the event of chemical emergencies. The report acknowledged that considerable improvement to emergency warning systems could be obtained with improved hardware, and it emphasized that enhanced warning additionally requires (1) urging LEPCs to act as the nexus for communication on alert systems between facilities and communities and (2) strengthening SERCs and LEPCs through technical assistance, guidance, hazards information, and procedures for notification of the public. The result of these improvements, EPA contends, would be establishment of more effective decision making for averting, as well as responding to, accidents at chemical facilities by facility managers, local officials, and the general public (EPA 1988a). EPA has further suggested a need for enhancing federal guidance to local communities in the wake of the Exxon Valdez disaster. Areas of special enhancement include notification, public warning, air dispersion modeling, and preventive measures as regards the chemical accidents Planning Guide (BNA 1989a).

Figure 1 depicts the CSDP model of community-based emergency planning. The role of SERCs and LEPCs in this EPA conception of community-based emergency planning is shown in Fig. 2. Important differences between these models relevant to equipment acquisition are in the areas of the allocation of emergency preparedness resources, the role of public participation, and the responsibility for decision making.

2.1 THE ALLOCATION OF EMERGENCY PREPAREDNESS RESOURCES AS A CONTENDING GOAL

Under the CSDP model, funding for emergency response upgrading and emergency training would be handled through a provision and disbursement system managed through FEMA's CCA with individual states. This system would be coordinated by a joint Army-FEMA steering committee. Under CCA, virtually all emergency management programs and activities with states and local governments would be consolidated to permit emergency management financial and technical assistance to be funneled through one application and funding channel. Emergency management capabilities would be easier to upgrade, and paperwork would be reduced. For this reason, FEMA has stated a preference for employing this established system for CSDP emergency equipment procurement (FEMA 1986).

Emergency upgrade funds are currently being channeled through the CCA system, allowing states, through their emergency management agencies, to further disburse funds to communities. While hazardous materials (HAZ/MAT) response training funds, under SARA Title III, have not been authorized for FY 1989, emergency upgrade funds for CSDP have been made available through these normal FEMA channels. LEPCs may participate in discussions concerning the use of these funds, but local and state governments are expected to take the lead role in acquiring needed equipment (FEMA 1989). Under the CSDP model, local emergency managers, county commissioners, and mayors (all of whom may, coincidentally, be LEPC members) are likely

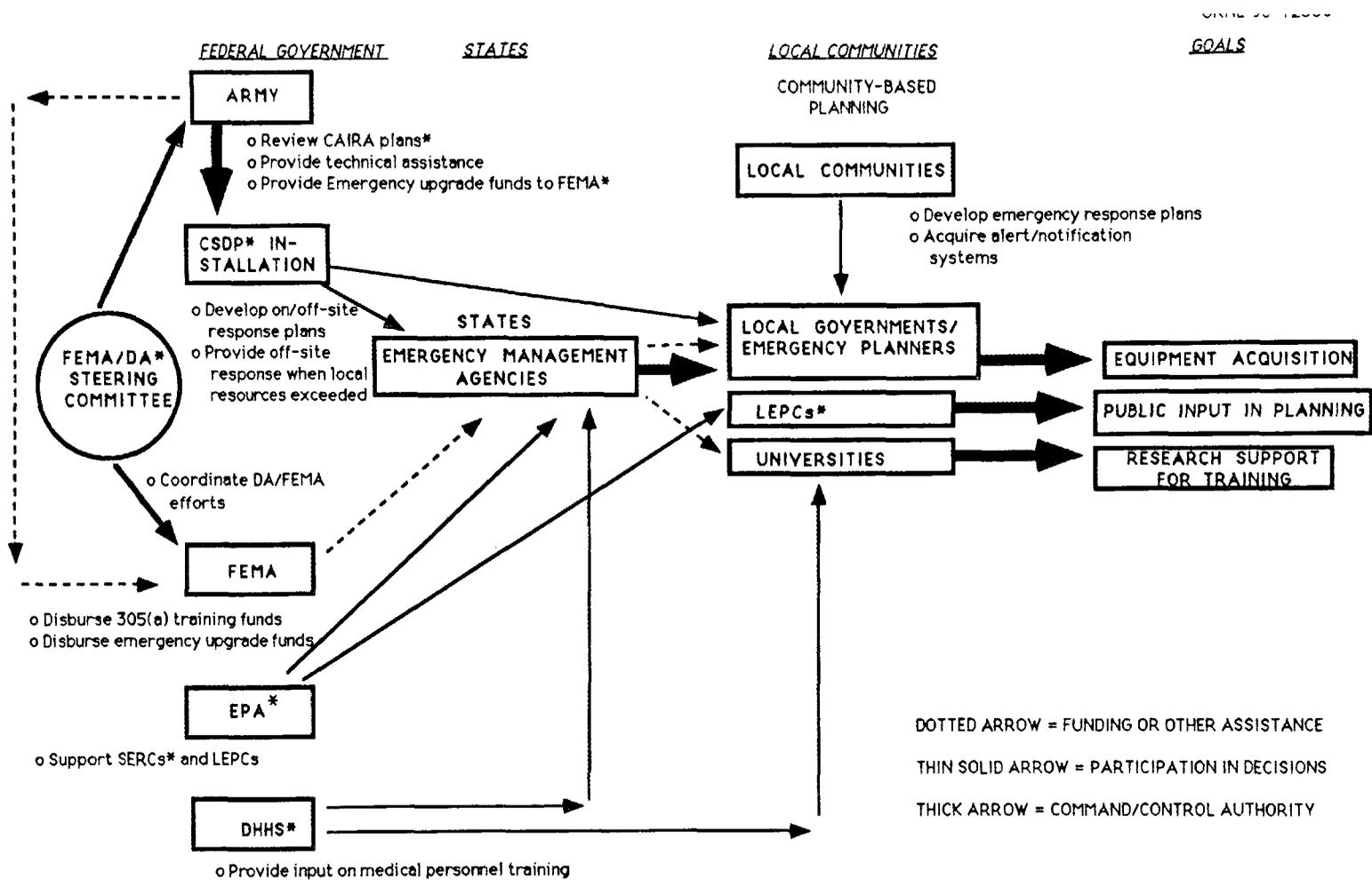


Fig. 1. The Chemical Stockpile Disposal Program model of community-based emergency planning.

Sources: Community and Worker Right to Know News 1988b. 2 (22), p. 4; U. S. Department of the Army 1988b. Memorandum of Understanding Between FEMA and the Department of the Army: Chemical Stockpile Disposal Program, Department of Defense, August 3; W. E. Isman, "Emergency Response Organizational Responsibility as a Result of the Superfund Legislation," 29 - 46 in The Community Right-to-Know Handbook, A. B. Waldo, Thompson Publishing Group, Washington, D. C., 1986.

- * CAIRA = Chemical Accident and Incident Response and Assistance
- CSDP = Chemical Stockpile Disposal Program
- DA = Department of the Army
- DHHS = Department of Health and Human Services
- EPA = Environmental Protection Agency
- FEMA = Federal Emergency Management Agency
- LEPCs = Local Emergency Planning Committees
- SERCs = State Emergency Response Commissions

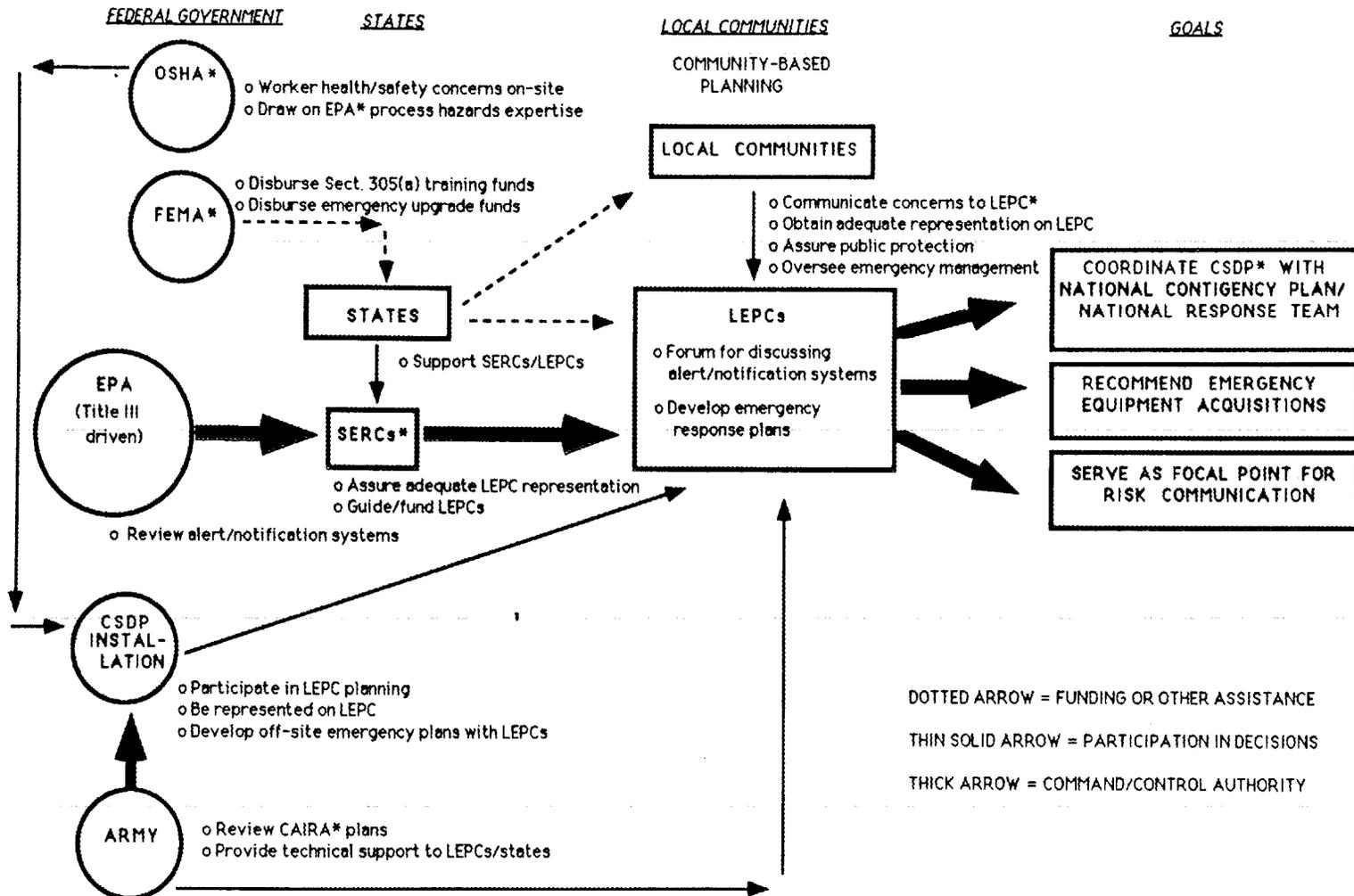


Fig. 2. The Environmental Protection Agency (Title III) model of community-based emergency planning.

Sources: Correspondence to Assistant Deputy for Chemical Demilitarization, U. S. Army, Preparedness staff, Office of Solid and Hazardous Waste, U. S. Environmental Protection Agency, December 8, 1989; C. M. Waisenen, "Management Systems Being Developed by OSHA and EPA," Environment Reporter, 17:231-2 (1988).

- * CAIRA = Chemical Accident and Incident Response and Assistance
- CSDP = Chemical Stockpile Disposal Program
- EPA = Environmental Protection Agency
- FEMA = Federal Emergency Management Agency
- LEPC = Local Emergency Planning Committee
- OSHA = Occupational Safety and Health Administration
- SERC = State Emergency Response Commission

to be the officials most directly involved in acquisition decisions. However, their authority stems from their official elected or appointed roles and responsibilities, not from their positions as LEPC members.

In contrast, the SARA Title III or EPA model leaves open the possibility of funding LEPCs to undertake some acquisition activities directly. EPA considers LEPCs valuable in that they provide forums for the discussion of notification and warning issues. Some EPA officials acknowledge, however, that LEPCs receive no special federal funding for their activities. Their sole sources of fiscal support are state and local government revenues, coupled occasionally with contributions in kind from local chemical companies or other firms. Because public and private support for LEPCs varies from state to state, however (see Appendix A, Feldman 1989a), it is difficult to foresee how all LEPCs could undertake acquisition and other emergency management activities with equal resolve without adequate resources.

2.2 THE ROLE OF PUBLIC PARTICIPATION IN EQUIPMENT ACQUISITION

Ideally, community-based emergency planning presumes that the public should participate in emergency equipment decision making because public interest, awareness, and understanding of available alternatives for emergency response are high. At some CSDP sites, however, interest in and knowledge about emergency warning and communication systems appears to be low.

At Lexington-Blue Grass Army Depot (LBAD), for example, public interest in the CSDP, as exemplified by attendance at scoping meetings and by local media coverage of CSDP issues, has tended to be centered around site-specific environmental impacts rather than emergency planning considerations, at least until recently. This attention to environmental impacts is partly due to widespread public concern over the programmatic decision for on-site disposal (see Appendix A, Feldman 1989b).

At Newport Army Ammunition Plant (NAAP), public interest in emergency planning issues is high, as exemplified by the same criteria as at LBAD, but little practical involvement by LEPCs in these issues has occurred. LEPCs are not well-developed in Parke and Vermillion counties in Indiana. EPA concedes that those two LEPCs are unlikely to take a very active interest in CSDP warning systems unless fundamental, proactive changes are made in the way LEPCs are administered (see Appendix A, Feldman 1989c).

Under the CSDP model, community-based emergency planning is expected to result from the interaction of numerous participants but in a less formal or prescribed manner than that of the EPA model. The general public, LEPCs, and even universities can play a role in equipment-related decisions, but local government emergency managers are seen as the key procurers of equipment. Although EPA contends that local communities and LEPCs should work together to ensure that warning and notification systems are widely discussed, implementation of this goal is subject to considerable regional variation, as discussed in Sect. 3.1 of this report.

2.3 RESPONSIBILITY FOR EMERGENCY PREPAREDNESS DECISIONS: LOCUS OF CONTROL

In the CSDP model, capital acquisition decisions for all types of emergency equipment are seen as the responsibility of established state and local government

agencies because of their expertise and experience. The EPA model is less clear on the issue of responsibility. Some within EPA prefer to see LEPCs actively involved in emergency equipment acquisition. Others wish to see a more manageable and modest LEPC role, perhaps limited to warning systems. EPA appears to be moving toward the view that its limited ability to test and ensure the adequacy of warning systems—and to implement the National Contingency Plan through upgrading LEPCs—forces both itself and LEPCs to concentrate on a role definition function rather than a hardware advisory function in community-based emergency planning (Waisenen 1988). By 1990, for example, some regional offices of EPA expect to assume a greater role in the joint development (with local governments) of simulations and exercises to test the adequacy of warning systems (see Appendix A, Feldman 1989d).

Under this role definition function, if communities have already established workable procurement systems, they should continue to rely on them (see Appendix A, Feldman 1989a). On the other hand, if experienced local emergency management officials happen to be members of LEPCs, their advice and guidance in procurement may be invaluable—especially in relating specific facility hazards to warning system effectiveness (see Appendix A, Feldman 1989d). As depicted in Fig. 2, EPA envisions the roles of other participants in warning system development and acquisition in the CSDP to be as follows:

- *CSDP installation.* Assume authority for on-site health and safety and accident prevention. EPA recommends that each installation consult with the Occupational Safety and Health Administration (OSHA) in this mission to maximize effectiveness in dealing with worker health and safety concerns and ensure prompt warning and notification in the event of a chemical accident/incident (Makris 1988).
- *State and local governments.* Oversee LEPC and SERC planning and their control of competitive bidding processes in major emergency procurement decisions. LEPCs may be incorporated into the bidding process if emergency management professionals participate actively as LEPC members.
- *FEMA/DA.* Provide financial and technical assistance, information, and hazards monitoring and establish standards and criteria for communities and CSDP installations. Both agencies are expected to work closely with OSHA and EPA.
- *OSHA.* Take on an increasing role in SARA Title III compliance as further interagency studies are conducted on the relationship between chemical facility hazards and the comparative costs of appropriate alert systems nationwide (see Appendix A, Feldman 1989e). Beginning in 1990, OSHA's role in the SARA Title III process will include providing specific protection standards and criteria for emergency responders at all federal facilities, including those under the jurisdiction of the Department of Defense (DOD) [Fed. Regist. 54 (Pt. 42) (April 5, 1989)].
- *LEPCs.* Prepare local emergency plans and programs and coordinate the efforts of local governments within their jurisdictions to assist in planning. Responsibility for equipment acquisition will probably be shared with established institutions, however, because statutory responsibility for acquisition is vague in most states. Some CSDP states have not permitted LEPCs to do more than SARA Title III has explicitly prescribed.

Whoever is ultimately given the responsibility for emergency equipment acquisition at CSDP sites will probably have to reconcile those aspects of the CSDP and EPA models

of community-based emergency planning pertaining to notification and warning. A 1988 EPA rule places federal facilities under the same remedial action obligations for emergency response that apply to private entities. The Army may not employ any guidelines, rules, or criteria for response actions and preparedness different from those of other institutions subject to SARA Title III [Fed. Regist. 53 (Pt. 245) (December 21, 1988)]. Apparently, warning and other emergency systems should also be subject to SARA Title III guidelines.

3. SARA TITLE III AND THE ACQUISITION OF EMERGENCY EQUIPMENT

EPA contends that communication among people involved in the public alert process can be significantly improved by bolstering LEPCs (BNA 1988d). However, LEPCs are hindered by their multiple responsibilities, their lack of resources, and, in some instances, their lack of authority to perform tasks other than those delegated under SARA Title III.

LEPC tasks under SARA Title III include (1) gathering data on chemical facilities and disseminating that information to the public and (2) incorporating public participation in chemical hazards planning. These responsibilities have proven to be overwhelming for three reasons:

- In the absence of federal and state funding, many LEPCs lack the resources to deal effectively with both emergency planning and right-to-know considerations (BNA 1988c). States with CSDP facilities and adjacent states have struggled to improvise adequate funding for LEPCs with varied success. This struggle may undermine LEPCs' ability to make adequate equipment acquisition decisions in addition to LEPCs' designated tasks.
- As of mid-February 1989, only 86% of LEPCs nationwide were actually functioning, and only 49% of those had submitted required chemical emergency plans to EPA and SERCs by October 17, 1988 (BNA 1989b). States with CSDP facilities and adjacent states generally mirror this trend of limited submissions of emergency plans (see Table 1). If equipment acquisition decisions await full functioning of LEPCs, delays in the acquisition of emergency equipment for CSDP may result.
- Facility compliance with right-to-know considerations constitutes a major problem occupying a considerable share of attention of LEPCs and SERCs in CSDP states and adjacent states. In two states (Colorado and Oregon), fewer than half of all chemical facilities were reported to be in compliance with SARA Title III right-to-know requirements as of March 1988 (see Table 2). Until more progress is made on right-to-know management, LEPCs may not have the time to attend to the details of equipment acquisition.

3.1 THE STATUS OF SARA TITLE III IN STATES IN WHICH CSDP FACILITIES ARE LOCATED AND ADJOINING STATES: IMPACT ON ACQUISITION ISSUES

There is considerable variation in SARA Title III implementation in CSDP states and adjacent states and communities. Nevertheless, common problems have emerged. Variations in community interest, resources, and experience in chemical emergency planning and response partially determine the extent to which SARA Title III positively influences the emergency notification and warning process. FEMA and EPA regional officials who are involved in CSDP emergency planning are in appropriate positions to observe problems. Much of the following analysis draws on their observations. These particular cases were selected because they involve the sites at which the on-site disposal option, identified as the preferred alternative by the CSDP, would be undertaken.

Table 1. Chemical facility compliance with reporting and right-to-know requirements of SARA Title III in states in which Chemical Stockpile Disposal Program facilities are located and adjoining states^a

State	Facilities reporting to state emergency response commission (%)
Alabama	75
Arkansas	NA ^b
Colorado	15
Illinois	40
Indiana	60
Kentucky	50
Maryland	60-70
Oregon	< 50
Utah	50
Washington	50

^aAll figures are states' own *estimates* as of March 1988 and are subject to change.

^bNA = not available. Arkansas has 420 estimated facilities encompassed by SARA Title III, but the number in compliance with right-to-know requirements is unknown.

Source: *Community and Worker Right-To-Know News* 2(23), p. 4, Thompson Publishing Group, Washington, D.C., March 22, 1988.

Table 2. Functioning Local Emergency Planning Committees (LEPCs) in states in which Chemical Stockpile Disposal Program facilities are located and adjoining states^a

State	Ratio of functioning to total LEPCs (%)
Alabama	85
Arkansas	NA ^b
Colorado	76
Illinois	77
Indiana	99
Kentucky	75
Maryland	100
Oregon	100 ^c
Utah	NA ^b
Washington	72

^aData are provided by states to the Environmental Protection Agency (EPA). Missing data are explained in two ways: a state was not asked to participate in the survey or did not respond to EPA when asked. A functioning LEPC is defined as one that has held at least one meeting and provided minutes of its activities.

^bNA = not available.

^cOregon has one statewide LEPC that advises the State Emergency Response Commission.

Source: *Community and Worker Right-To-Know News* 2(23), p. 3, Thompson Publishing Group, Washington, D.C., March 22, 1988.

3.1.1 Maryland: Aberdeen Proving Ground

Federal Region III states, including Maryland, have made relatively rapid progress in implementing SARA Title III programs. Although about only 50% of LEPCs submitted required chemical emergency plans by October 17, 1988 (see Appendix A, Feldman 1989d), early efforts were made to organize LEPCs and SERCs. This effort is exemplified by Maryland's establishment of a multiagency Hazardous Materials Advisory Committee that functions as Maryland's SERC. This committee was established prior to passage of SARA Title III.

EPA and FEMA officials have slightly divergent assessments of the committee's effectiveness in emergency warning and notification. By 1990, EPA expects to begin applying some of the findings of its 305(b) study on warning systems to Region III states, including Maryland. EPA will begin conducting simulations of chemical accidents to correct problems in warning systems discovered through emergency exercises and to recommend changes in alert, warning, and notification systems. These efforts reflect EPA's relatively high level of confidence in Region III's progress in implementing SARA Title III and its readiness to move beyond right-to-know issues. FEMA views SARA Title III's impacts on warning systems in Region III as more modest than EPA considers them to be, however, because of a lack of federal funding.

EPA and FEMA also have slightly divergent perceptions of the appropriate role of SARA Title III in the equipment acquisition process. EPA insists that there are two advantages to employing LEPCs and SERCs in this process. First, in Region III states, especially Maryland, these institutions are closely integrated with state and local emergency management agencies and comprise some former FEMA people whose knowledge and experience has benefitted discussions of warning systems issues (see Appendix A, Feldman 1989d). The only barrier to advancing LEPCs' contribution further is data collection. When the nature of chemical hazards is better understood, it is plausible that LEPCs may vigorously participate in all areas of warning and notification, including equipment acquisition. Both agencies agree that there is no barrier to incorporating SARA Title III in community multihazards planning (National Response Team 1987).

FEMA concedes that experience with dangerous chemical releases has brought about an awareness of the need for greater resources to upgrade chemical emergency warning, notification, and communication systems in Region III. Emergency training has become an established part of FEMA's HAZ/MAT curriculum for state and local emergency managers (see Appendix A, Feldman 1989f).

3.1.2 Alabama and Kentucky: Anniston Army Depot (ANAD) and Lexington-Blue Grass Army Depot (LBAD)

Most LEPCs in the southeastern states encompassed by federal Region IV do not become involved in equipment acquisition issues because of lack of resources, complexity of the issues involved, and lack of clarification of LEPC/SERC responsibilities in this area (see Appendix A, Feldman 1989a).

FEMA and EPA officials generally share similar perceptions concerning the role of the SARA Title III process in equipment acquisition in Alabama and Kentucky. FEMA and EPA agree that LEPC effectiveness varies in this region according to such criteria as size and affluence of communities, the enthusiasm of LEPC chairpersons, and

the amount of chemical facility cooperation with local communities. FEMA and EPA contend that Calhoun County, Alabama, where ANAD is located, has done an exceptional job of establishing an emergency preparedness infrastructure. Although lacking the fiscal resources of larger metropolitan areas, the county emergency manager has compensated for this apparent deficiency by strength of personality (see Appendix A, Feldman 1989a, Feldman 1989b).

3.1.3 Indiana and Illinois: Newport Army Ammunition Plant

EPA and FEMA Region V officials generally concur that LEPCs, as currently administered in the Newport area, have displayed relatively little interest in warning and notification issues related to CSDP. Region V was the first region to contribute to the *Review of Emergency Systems Report to Congress* per Sect. 305(b) in SARA Title III. Both agencies cooperated extensively during the effort, and their similar perceptions of local conditions are exemplified by the same group initiative (see Appendix A, Feldman 1989c).

Region V of EPA concedes that LEPCs within the Newport area are not functioning as well as is desired. However, EPA asserts that active local and state participation is vital to CSDP emergency planning as well as the spirit and intent of SARA Title III. One mechanism suggested for temporarily overcoming the weak SARA Title III structure in Parke and Vermillion counties is to encourage intervention by the Indiana SERC and State Department of Civil Defense respectively, in place of the Vermillion County or Parke County LEPCs, helping integrate CSDP emergency warning issues. Both counties' LEPCs have their own designated hotlines, serve as conduits for all state agencies with emergency management responsibilities, and are linked to several statewide emergency service networks, including the Emergency Broadcast System (see Appendix A, Feldman 1989c).

State intervention may be viewed as a viable alternative where LEPCs are functioning at less-than-effective levels. Recommending or reviewing acquisition decisions and advising methods for reconciling differences in on- and off-post warning-system designs are appropriate for both state entities. LEPCs having administrative problems would most likely welcome help that the state of Indiana might be able to provide in making these important decisions. Although EPA is strongly tied to this view, it expects to continue working closely with FEMA in the development of warning systems and to defer to FEMA's greater expertise in the specialized area (see Appendix A, Feldman 1989c). Thus, differences in agency philosophy need not constitute an obstacle to interagency cooperation on acquisition issues.

FEMA is less optimistic than EPA is about the role of LEPCs in the area of warning and notification. Indiana LEPCs have no special statutory authority to undertake activities in this area. Although each LEPC would be given \$5000 to spend on equipment such as microcomputers (see Appendix A, Feldman 1989g), the LEPC in Vermillion County is staffed on a volunteer basis only, making it difficult for them to deliberate on how to wisely make such purchases or to compare equipment benefits. Moreover, the Parke County effort is slightly better organized. The greatest impact of the Parke County effort has been to force Vermillion County to become concerned that Parke does not get all the FEMA money—a reference to FEMA-disbursed upgrade funds for CSDP (see Appendix A, Feldman 1989g).

An additional hindrance to active LEPC involvement in equipment acquisition is the relationship between state procurement policies and county commissioners. Indiana

has a strict auditing system that requires competitive bidding for even relatively small capital expenditures. It has sometimes been difficult for local communities to procure needed emergency equipment. Moreover, detailed state requirements tend to slow the acquisition process (see Appendix A, Feldman 1989g). Thus, reliance on LEPCs, even if possible, would not be a panacea for all problems related to emergency equipment acquisition at NAAP.

3.1.4 Arkansas: Pine Bluff Arsenal (PBA)

SARA Title III has had little appreciable impact on command and control, communication, or warning systems development in the Pine Bluff area. EPA believes that Arkansas has developed a very strong FEMA-connected emergency planning program for CSDP. This program benefits from an active LEPC in Jefferson County; a strong LEPC chairperson and emergency manager; and continuing dialogue among PBA, Jefferson County, the state of Arkansas, and various federal agencies (see Appendix A, Feldman 1989h, Feldman 1989i).

While overall LEPC competence has been impressive, LEPC ability to address warning and notification issues has been hampered by the lack of fiscal resources in support of SARA Title III and by the way that Arkansas has staffed LEPCs. LEPCs in Arkansas, as in other regions of the country, were initially established by county judges (elected county commissioners) who, in most instances, were not in positions to select the best people to serve on these planning boards (see Appendix A, Feldman 1989h). Compounding matters, Arkansas has been criticized by EPA for appointing chemical industry representatives to serve on its LEPCs as designated community representatives when individuals from the community should have been appointed (BNA 1987).

3.1.5 Colorado and Utah: Pueblo Army Depot (PUDA) and Tooele Army Depot (TEAD)

EPA Region VIII authorities do not anticipate that LEPCs will take charge of equipment acquisition decisions pertaining to CSDP. EPA contends that the LEPC role in warning, notification, and communication issues should be advisory. Local governments should ultimately control the procurement process. Whoever manages these decisions must ensure that local government officials and people living near CSDP installations are satisfied with the acquisition process and the equipment being procured (see Appendix A, Feldman 1989j).

EPA's principal concern at PUDA and TEAD is Army compliance with SARA Title III reporting requirements for stockpile characteristics and threshold releases. Region VIII officials contend that local people who serve on LEPCs must be provided with complete information on the chemical stockpile at PUDA and TEAD. In the event of a chemical release with possible off-post consequences (which EPA interprets to mean *any* release), local environmental officials and emergency response coordinators should be notified promptly (see Appendix A, Feldman 1989j).

FEMA Region VIII concurs with this view that officials should be notified. In Utah, for example, LEPCs have been brought into emergency management decision making quickly because their members are mostly emergency management professionals who have been regularly involved in HAZ/MAT planning (see Appendix A, Feldman 1989k). Even in Colorado, where SARA Title III efforts have lagged slightly behind those

of Utah, incorporation of LEPCs into established emergency management networks has proceeded apace.

Thus, one lesson of Region VIII's experience under SARA Title III is that LEPCs could become competent to oversee, or at least constructively participate in, procurement decisions if their memberships included emergency management professionals. This integration of competent professionals into the SARA Title III process is a worthwhile goal for every CSDP site. PUDA and TEAD lie in areas where awareness of hazardous chemical accidents from train derailments, anhydrous ammonia spills, and military-related activities tends to be high. In addition, Regional Response Team (RRT)-EPA personnel in Region VIII are former FEMA employees, so interagency disagreements are reduced. Finally, the CSDP is viewed by RRT personnel as an important program but not an entirely unique HAZ/MAT program (see Appendix A, Feldman 1989k). Thus, in defining the proper role of LEPCs as regards equipment acquisition or other management-related issues, it is necessary to consider the character of a particular LEPC.

3.1.6 Oregon and Washington: Umatilla Army Depot (UMDA)

SARA Title III does not appear to have made a significant impact on emergency equipment acquisition in Pacific Northwest states, including Oregon and Washington. SARA Title III activities in these states are focused on the collection and dissemination of right-to-know information. In more than half the cases, LEPCs have not even submitted emergency plans, and LEPCs have done virtually nothing on acquisition of emergency warning or notification systems (see Appendix A, Feldman 1989l).

The existence of a single statewide LEPC, a unique SARA Title III situation in Oregon, had created some problems for community-based planning. Local interest in chemical emergency planning issues tended to be diminished because of the assumption that many problems would be resolved in the state capital (see Appendix A, Feldman 1989l). In Washington state, by contrast, while county-wide LEPCs have all been formed and are operating, interest in their activities varies according to each community's level of industrialization and experience with chemical accidents. Given this varying level of industrialization and accident experience, Region X EPA has not urged LEPCs in Oregon or Washington to extend their activities much beyond planning and right-to-know activities.

FEMA Region X officials view SARA Title III's relationship to warning and notification issues from a different perspective. FEMA Region X believes that a primary program responsibility is the training of first responders in Hermiston, Umatilla, and Morrow counties. Because notification in the event of a chemical accident must be timely, it is important to FEMA that the content of warning messages in the event of CSDP accidents be absolutely clear to facilitate training (see Appendix A, Feldman 1989m). Thus, regardless of what role particular local institutions have in warning and notification decision making for CSDP, attention to the particular concerns of federal agencies' regional officials will be an important aspect of equipment acquisition.

3.2 SUMMARY: SARA TITLE III AND EQUIPMENT ACQUISITION

As noted in Sect. 1.2, reconciliation of the EPA and CSDP approaches, although difficult, can be accomplished. At some sites, LEPCs have shown themselves capable of participating vigorously in acquisition-related decisions. At other sites, however,

experience suggests that established local emergency management agencies are better qualified to make such decisions.

Interviews with FEMA and EPA officials involved in both SARA Title III implementation and CSDP emergency planning suggest that three issues are of particular consequence. First, regional EPA and FEMA officials are concerned that emergency systems be functionally equivalent across sites. This means, for example, that each site should acquire warning, communications, and other systems appropriate to its population density and population location, meteorology, geography, planning-based accidents, stockpile characteristics, and other factors. As a result, these officials contend that it is more important that the outcome of decisions lead to adoption of effective emergency systems than that the prescriptions of bureaucratic flow charts be rigidly followed. Thus, if existing acquisition and procurement procedures and processes are effective in ensuring functional equivalency, reliance on them should continue. SARA Title III would not be compromised by this practice.

Second, EPA's contention that warning and notification system effectiveness can be significantly enhanced through the improvement of communication between communities and chemical facilities is shared by FEMA. However, there are widely divergent views on the role LEPCs should play in this enhancement. Most people interviewed believe that LEPCs can best be utilized for community outreach (i.e., increasing public awareness of hazards and the means to mitigate them). Established institutions should be relied on for management functions. Thus, LEPCs could be involved in the evaluation of warning systems through discussion of risk communication issues. Emergency managers could then study reports of these discussions when developing criteria for the procurement of effective warning systems at each site.

Finally, some state emergency managers are concerned that, without clear determination as to who will be responsible for allocating emergency upgrade funds, the issue of who will make procurement decisions remains unsettled (see Appendix A, Feldman 1989i). Some CSDP emergency systems may need to be procured simultaneously for all sites (by joint FEMA/DA agreement) to avoid multiple or even sequential purchases of equipment that is continually improved and changed. Other emergency systems may be procured by local communities and states without risking high cost or inefficiency.

4. THE ISSUE OF TORT LIABILITY AND THE ACQUISITION OF EMERGENCY EQUIPMENT: IMPACTS ON STATE AND LOCAL GOVERNMENTS

Following passage of SARA Title III, concern was expressed over the liability of SERC and LEPC members. In theory, if it is shown that an emergency plan failed to address a potential hazard resulting in a chemical accident causing fatalities, injuries, or destruction of property, LEPC and SERC participants could be sued. The situation regarding liability for inadequate emergency planning is complex, depends on the particular emergency response measure contemplated, and, in many states, is undergoing change.

As a general rule, the threat of liability judgments being rendered against individuals involved in emergency equipment procurement, acquisition, or recommendation is extremely remote (Pine 1989). If public officials, including members of LEPCs and SERCs, make a "prudent, reasonable effort" to address emergency planning issues, meet the required SARA Title III (and other legal) deadlines, and obey all prescribed state and local ordinances regarding competitive bidding and related issues, litigation leading to a finding of fault can most likely be avoided (see Appendix A, Feldman 1989h).

4.1 GOVERNMENTAL TORT LIABILITY AND SARA TITLE III INSTITUTIONS: VARIED INTERPRETATIONS

Public officials who are involved with emergency planning and response recognize that the possibility of civil suits by angry citizens or interest groups is always present (Glass 1988; Nichols 1988). Tort liability, as generally defined, encompasses the commission or omission of certain acts, in violation of one's legal duty toward another (Pine 1988).

In emergency planning, a distinction can be made between two broad practices as regards liability. The first, dominant until about 1960, is rooted in the English common law practice of *sovereign immunity*. State and local officials performing emergency management or related functions were generally considered immune from civil suits in the normal course of their duties. All but five states recognized this practice (Pine 1988).

After 1960, state courts and legislatures began eroding sovereign immunity by extending the principle of liability to certain state and local officials. The significance of these changes was that a fine distinction in liability statutes was introduced between so called *governmental functions* (essential public services critical to health and safety, usually immune from liability) and *proprietary functions* (revenue-producing activities—such as trash collection, public transit, parking garages, or recreation services—in which a government agency theoretically competes against the private sector, not always immune from liability).

Most states define emergency planning and response activities as governmental functions. Significant immunity protection from civil suits is extended to state and local officials and LEPC members. Moreover, an emergency preparedness unit that operates as part of a local government agency involved in a governmental function (e.g., one that handles public safety, police protection, or fire protection) would most likely be immune from tort liability (Pine 1988).

Three other general considerations affect the degree of immunity. First, most emergency management decisions, such as adopting a specific management plan, hiring

staff, acquiring a certain type of emergency equipment, ordering an evacuation, or conducting a preparedness exercise, are termed *discretionary activities*. Such activities depend on the judgment of elected officials specifically empowered by statute to exercise discretion (Pine 1988). When engaged in these activities, officials are immune from civil suits.

However, after discretionary decisions are made, if civil servants fail to implement the decision in complete accordance with the requirements of the decisions, they may be liable. These actions to implement decisions are termed *operational activities* and are not immune from civil suits (Pine 1988). Thus, the failure to install a warning or communications system properly, to utilize command and control equipment appropriately, or to operate and maintain meteorological equipment correctly could subject a person to liability if damages were incurred from a CSDP accident.

Second, and related to the notion of operational activities, is the concept of *negligence*—the unintentional failure to perform certain activities. In most states, if a standard of care imposed on an officer of government empowered to provide emergency response is insufficiently met, that individual may be liable for damages (Pine 1988). This is significant, because establishing negligence almost always depends on the facts of a particular case. Negligence cannot usually be defined merely as failure by officers of government to follow specific procedures.

Third, there is considerable variation from state to state on the definition of "public employee" as well as determination of what specific emergency management or management-related activities are immune from liability. As a general rule, a public employee is defined as a paid or voluntary employee of a governmental unit or a contractor of that unit. This definition may or may not extend to LEPC or SERC members in every state. Furthermore, the range of emergency management activities encompassed by immunity statutes may be broad—covering a range of planning, preparedness, and response activities—or relatively narrow and restricted only to actions conducted during actual emergencies.

In some states, SERCs and LEPCs are considered to be state agencies. Thus, their members are immune from civil liability under provisions of statutory law (EPA 1988c). However, the issue of immunity is less clear than has been conceded by federal agencies. In states where strong institutional immunity is provided to state and local officials, EPA is confident that individual liability for decisions made by LEPC or SERC members is "no greater than that for other public employees" (see Appendix A, Feldman 1989e). On the other hand, where institutional liability is itself uncertain or still evolving, it may be said that the status of LEPC/SERC liability is less certain. Clearly, immunity from liability is being weakened, but how quickly remains open to contention, as discussed in Sect. 4.2 (see Appendix A, Feldman 1989d).

4.2 IMMUNITY AND TORT LIABILITY IN CSDP STATES AND ADJACENT STATES: AN EVOLVING MATRIX

A fairly broad cross section of tort liability status for emergency planning exists in states with CSDP facilities, as well as adjacent states and states potentially affected by the program. In general, if LEPCs undertake equipment acquisition decision making in CSDP states, they may be subject to a greater degree of liability for poor decisions than would be the case for established political jurisdictions (i.e., local governments) making these same decisions.

Table 3 depicts the status of immunity laws and practices in CSDP states and adjacent states. In every one of these states, local government officials (as distinguished from LEPC members) are immune from liability in an actual emergency (BNA 1988e). The immunity status of SERC/LEPC members, however, as well as the range of activities protected from liability, remains problematic.

4.2.1 Tort Liability and the Acquisition of Emergency Equipment: States, Communities, and LEPCs

Three general conclusions can be drawn from the status of tort liability in CSDP states as depicted by Table 3. First, as long as significant effort is expended on local emergency planning by qualified institutions, officials are likely to be immune from tort liability. Second, if these efforts—regardless of the degree of care—are isolated entirely from the SARA Title III process, immunity from tort liability is likely to be lower because tort claimants are then placed in a position to argue that established decision-making institutions were negligent in carrying out explicit planning-based responsibilities in accordance with federal and state laws (Pine 1989). Thus, even if LEPCs do not make acquisition decisions (and nothing regarding tort liability dictates that they should), it is still advisable that those who make these decisions demonstrate how they complied with the procedural as well as substantive requirements of SARA Title III.

Finally, in all CSDP states, LEPCs and SERCs *are* state agencies. They are thus entitled to the same discretionary immunity from liability granted to other agencies. Some states are more explicit about this discretionary immunity than others, however. Generally, immunity is more likely if (1) LEPC members are appointed by SERC, (2) SERCs and LEPCs are statutorily established and recognized, and (3) LEPC and SERC members exercise decisions within the legally designated scope of their authority. Thus, although it may be immune from liability, if an LEPC makes equipment acquisition decisions and statutory authority for doing so is ambivalent (in Indiana, for example), members may be liable for damages accruing from faulty emergency system performance.

Based on the information in Table 3, states with CSDP facilities and adjacent states may be classified into one of three immunity-from-liability categories for LEPC/SERC participants.

- *Full Immunity Coverage.* States in this category have statutes that enable members of SERCs and LEPCs to be treated as government officials who are immune from fiduciary responsibility in the event of a chemical accident. In one state (Washington state), a "Good Samaritan" statute frees SERC and LEPC members from liability when engaged in emergency planning activities. In full immunity coverage states, accidents admitted to be the responsibility of the states are compensated up to specific liability limits contained in statutes. States in this category include Indiana, Kentucky, and Washington.
- *Probable but Ambiguous Immunity Coverage.* States in this category (1) have statutes pending before the legislature that would grant immunity from civil suits or (2) have rendered opinions through states' attorneys general stating that SERC and LEPC members are immune from civil suits. Because statutory authority is unclear, however, changes in state administration could modify this status. Moreover, even when a legal opinion is rendered, tort immunity remains untested until an actual challenge occurs

**Table 3. Status of tort liability for emergency planning in states in which
Chemical Stockpile Disposal Program facilities are located and adjoining states**

State	Sovereign immunity	Discretionary immunity ^a	Governmental proprietary immunity	Other	Conditions	SERC/LEPC immunity
Alabama	Partial waiver of immunity provided by various statutes; state retains immunity. Suits permitted in certain areas	Yes	NA ^c	State claims board reviews liability. Local plan is required. Neglect not immune	Covered in all disasters. Broad definition of emergency, including "man-made" events	Covered according to the attorney general ruling; enabling legislation is supposed to address issue further ^b
Arkansas	Retained immunity (reinstated 1969). Local governments immune	Yes	NA ^c	State commission reviews liability. Local plan is required	Covered in all disasters. Broad definition of emergency, including "man-made" events	Probably covered; opinion from the attorney general requested
Colorado	Partial waiver provided by comprehensive tort liability statute; suits permitted in certain areas. Damages are limited	Yes	Yes	State assumes financial liability for claims in an emergency situation. Local plan is required	Covered in all disasters. Broad definition of emergency, including "man-made" events	Draft legislation would explicitly protect LEPC/SERC members

Table 3. (continued)

State	Sovereign immunity	Discretionary immunity ^a	Governmental proprietary immunity	Other	Conditions	SERC/LEPC immunity
Illinois	Partial waiver provided by comprehensive tort liability statute; damages are limited	Yes	NA ^c	A state-claims board reviews liability. Local plan is required	Covered in all disasters. Broad definition of emergency. Purchase of insurance constitutes a waiver of immunity	Ruling requested of the attorney general
Indiana	Partial waiver provided by comprehensive tort liability statute; damages are limited	Yes	NA ^c	A local plan is required for establishing liability and immunity	Covered in all disasters. Broad definition of emergency, including "man-made" events	State statutes cover LEPC/SERC members
Kentucky	Partial waiver provided through selected statutes. Suits are permitted in certain areas	Yes	Yes	A local plan is required; a state-claims board reviews financial liability	Covered in all disasters. Broad definition of emergency, including "man-made" events	Existing laws cover LEPC/SERC members

Table 3. (continued)

State	Sovereign immunity	Discretionary immunity ^a	Governmental proprietary immunity	Other	Conditions	SERC/LEPC immunity
Maryland	Partial waiver provided through selected statutes. Suits are permitted in certain areas	Yes	Yes	Government employees are immune	Covered in all disasters/emergencies	The attorney general ruling says LEPC and SERC members are covered
Oregon	Partial waiver provided through comprehensive tort liability statute	Yes	NA ^c	Governmental units immune only during actual emergencies	Covered in all disasters. Broad definition of emergency, including "man-made" events	The attorney general ruling says LEPC and SERC members are covered
Utah	Partial waiver provided through comprehensive tort liability statute	Yes	NA ^c	Government employees are immune. Local plan not required. Neglect not immune	Covered in all disasters. Broad definition of emergency, including "man-made" events	Ruling request from the attorney general. Status ambiguous

Table 3. (continued)

State	Sovereign immunity	Discretionary immunity ^a	Governmental proprietary immunity	Other	Conditions	SERC/LEPC immunity
Washington	Abolished sovereign immunity (1961); has comprehensive tort liability statute.	NA ^c	NA ^c	State assumes financial liability for all claims in an emergency. Local plan required	Covered in all disasters. Broad definition of emergency includes "man-made" events	LEPC and SERC members covered by "Good Samaritan" law

^aDiscretionary immunity frees public officials from the fear of tort liability if a decision results in harm to another.

^bIn Alabama, although facility representatives serving on LEPCs are said to be covered, the law has not been adequately tested in the courts.

^cNA = not applicable.

Sources: J. C. Pine, *Tort Liability of Governmental Units in Emergency Actions and Activities*, Federal Emergency Management Agency, 1988; J. C. Pine, *Tort Liability in Emergency Planning: Technical Assistance Bulletin 7-Chemical Emergency Preparedness and Prevention*, U.S. Environmental Protection Agency, January 1989; *Community and Worker Right-to-Know News*, 3(6) Jan. 8, 1989, 7-8; *Community and Worker Right-to-Know News*, 3(7) Jan. 22, 1989, 8-10; *Right-to-Know Guide*, Vol. 521, no. 14, Bureau of National Affairs, 6554-55, 1988.

through litigation (BNA 1988b). States in this category include Alabama, Arkansas, Maryland, and Oregon.

- *Moving Toward Coverage or Coverage Still Uncertain.* Current status of immunity is unclear because of the absence of a statute or an opinion from an attorney general. Draft legislation is either pending or proposed. Colorado, Illinois, and Utah are in this category.

In summary, tort liability may be engendered for negligence, which assumes an explicit duty not carried out leading to actual harm. Failure to develop and implement an emergency response plan and to keep it current or to operate emergency systems properly could be termed negligence. Although tort liability in emergency response is slowly eroding, procurement decisions are likely to be immune from tort liability if the following procedures are followed:

- Make a careful, prudent effort to ascertain equipment needs, evaluate the needs thoroughly, and include all relevant constituencies at every level of government in discussions concerning those needs.
- Ensure that all constituent institutions participating in the acquisition process are statutorily recognized and given explicit authority to participate in procurement decisions.
- Ensure functional equivalency of emergency systems across sites by reviewing purchases (and actual operations) of procured equipment by a high-level review body such as FEMA.

5. ADVANTAGES AND DISADVANTAGES OF USING ESTABLISHED POLITICAL INSTITUTIONS FOR EQUIPMENT ACQUISITION AND PROCUREMENT

EPA thinks that LEPCs can help improve the communication process among various constituents of the public alert system (i.e., local communities and chemical facilities) (BNA 1988b). Although few would dispute that improvements to organizational interface and coordination between different layers of government are desirable (Sorensen et al. 1988), in most instances LEPCs are not equipped to make these improvements because of the following reasons.

- Insufficient time, deficient public awareness of LEPCs, lack of resources, lack of planning experience, and lingering confusion over the relationship between SARA Title III and existing state laws impede the ability of LEPCs to make emergency equipment acquisition decisions (*Community and Worker Right-to-Know News* 1988c). LEPC activity in chemical emergency planning varies enormously. If, as in the case of LBAD, the CSDP is viewed more as a "Not in My Back Yard" problem than an emergency response issue, little LEPC participation in warning and notification issues is likely (see Appendix A, Feldman 1989b).
- In its report to Congress on public alert systems, EPA concluded that as SERCs and LEPCs "become more active," they will provide local forums for discussing types of notification and alert problems, especially because they will better integrate the participation of chemical facilities in emergency planning. Evidence suggests that most LEPCs have not attained the level of activity necessary for assuming this responsibility of serving as a forum for discussing notification and alert problems. Moreover, as noted previously, LEPC authority for equipment acquisition and procurement varies from state to state. Indiana LEPCs have no authority for equipment acquisition or procurements, while in Oregon, changes have occurred in the single statewide LEPC structure. Nominations have been solicited from local county emergency planners for potential LEPC members (see Appendix A, Feldman 1989i).
- EPA concedes that although LEPCs and SERCs may be instrumental in preparing and coordinating public emergency programs, local governments (and states) will continue to be responsible for overseeing these plans within their boundaries (EPA 1988c; Waisenen 1988). This view tends to be predominate among agency officials interviewed for this report.

Several officials have suggested that LEPCs are not in positions to make procurement decisions. Based on their growing hazards experience through the development of local chemical emergency plans, however, LEPCs may be able to offer insights into equipment-related needs. Help that LEPCs may be able to offer during the procurement process includes (1) advising how local fiscal constraints affect equipment acquisition, (2) informing about regional coordination needs for procurement of warning and other emergency systems, (3) stressing the need to ensure that first responders are provided with adequate equipment for accident response and off-post command and control, and (4) suggesting stronger means of cooperation through formal agreements between cities and counties (see Appendix A, Feldman 1989e). There is partial

confirmation of an emerging trend toward such consultation among cities, counties, and LEPCs.

One recent study of public perceptions of LEPC members has concluded that although no single agency commands a significant degree of respect by the public in the area of hazardous materials management, trust that LEPCs are "credible and knowledgeable sources" is growing (BNA 1989c). In light of evidence that suggests that forestalling LEPC membership attrition (because of frustration, time constraints, or concerns over member liability) is becoming increasingly difficult (BNA 1988a), it is clear that efforts need to be made to supply LEPCs with adequate resources to retain high levels of credibility.

6. CONCLUSIONS: SIGNIFICANCE OF RECONCILING THE EPA AND CSDP MODELS FOR ORGANIZATIONAL EFFECTIVENESS IN EMERGENCIES

EPA has broader concerns in warning and notification than the micromanagement of procurement. EPA's SARA Title III efforts are becoming increasingly focused on prevention of HAZ/MAT accidents and warning system response. EPA facility audits, which are increasing in frequency, and prescribed management controls for chemical companies are methods EPA is beginning to use to forestall and minimize the impacts of chemical accidents (see Appendix A, Feldman 1989d).

Thus, ostensible sources of interagency friction, such as FEMA's preference for multihazards planning versus EPA's preference under SARA Title III for single integrated Hazardous Materials Contingency Plans are overstated (National Response Team 1987). Each agency has clear missions and has made great strides in effecting positive changes by ongoing, cooperative working relationships. To the extent that all interested local, state, and federal agencies are included in the acquisition process for warning, notification, and communication equipment, they will be more amenable to defer to one another in areas of demonstrated special competence. In addition, public acceptance of these decisions is likely to be easier to obtain (see Appendix A, Feldman 1989c). It is also likely that the role of various agencies in warning, communication, command and control, and other emergency systems procurement and acquisition will continue to evolve. A study under way by one subcontractor, for example, suggests that four administrative approaches to the issue of procurement can be identified. Each of these approaches, as well as combinations thereof, has unique advantages and disadvantages (Schneider Engineering, Inc. 1989b). These advantages and disadvantages may become attenuated or compounded as SARA Title III evolves.

In evaluating the advantages and disadvantages posed by the CSDP and EPA approaches, the literature on organizational response to emergencies suggests three measures of performance that can serve as useful guides for evaluation: flexibility of organizational response, relationships among emergency organizations (also known as "domain consensus"), and disaster experience.

Disaster experience enhances the ability of an emergency response system to plan for disasters by providing feedback on past effectiveness in responding to emergencies and by identifying deficiencies that inhibited effective response (Holland 1975; Mileti et al. 1975). In short, the more disaster experience an organization has, the better it should be able to plan effectively for future emergencies. In most communities, including those discussed in this report, disaster experience tends to be greater among the members of established emergency response organizations than within SARA Title III LEPCs. The exceptions, as noted, are situations in which LEPC members are also officials of established emergency response organizations.

Flexibility of organizational response refers to organizational ability to respond quickly and to coordinate post-disaster actions rapidly, with a minimum of alteration in organizational behavior (Drabek et al. 1981; Pavlak 1988; Mileti and Sorensen 1987). Again, as regards planning for emergency equipment acquisition, there is much to be said for incorporating the perspectives of both SARA Title III officials and those employed by established emergency response organizations in equipment acquisition decisions. As has been seen, different local emergency response agencies have different competencies pertaining to the identification of equipment acquisition needs. Organizational flexibility

in this area is likely to be enhanced by incorporating the viewpoints and perspectives of as many local agencies as possible in this acquisition process.

Finally, it is desirable for emergency organizations engaged in common tasks or different parts of a task, such as emergency equipment acquisition, to be able to identify their respective roles as clearly as possible (Kreps 1978; Dynes 1978). This role identification makes it possible for each organization to plan its activities and identify its needs in a responsible and coordinated manner. This role identification task is one that LEPCs established under SARA Title III are optimally equipped to perform, because they comprise local government officials from numerous jurisdictions and agencies. As a result, once again it is advantageous for the CSDP to seek ways to better mesh the different acquisition approaches exemplified by the CSDP and EPA models.

One recommendation for CSDP emergency equipment acquisition that follows from this role identification task is that all site-specific acquisition decisions should be screened through LEPCs, or special subcommittees of LEPCs, before states submit requests through the established CCA system discussed in Sect. 2.1. It is not necessary that LEPCs approve or disapprove of decisions; rather, that they have the opportunity to attach an independent assessment to these acquisition decisions.

6.1 THE FUTURE OF SARA TITLE III AND EMERGENCY EQUIPMENT ACQUISITION DECISION MAKING

It is clear that OSHA, now only slightly involved in emergency planning for CSDP, will play an increasingly important role in the implementation of SARA Title III programs. How soon this growing role will come about and what form it will take are less clear. OSHA representatives have served on a number of EPA-sponsored task forces pertaining to the development of Material Safety Data Sheets (MSDS), as prescribed under Sect. 311 of SARA Title III. They also serve on most RRTs established under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980. Finally, they are considered a valuable resource for identifying chemical facilities hazards missed by other agencies (see Appendix A, Feldman 1989e). For example, the MSDS reporting provision of SARA Title III was originally based on the OSHA-HC (hazard communication) standard.

Regarding emergency systems acquisition, chemical safety audits of federally owned work places may, in time, more closely involve OSHA in assessing the adequacy of warning systems for protecting on-post personnel likely to be affected by a chemical storage or disposal accident. In addition, Congress has forced closer OSHA integration into the SARA Title III process by requiring the establishment of standards and criteria to protect chemical accident responders (see Appendix A, Feldman 1989a). This integration of OSHA into the SARA Title III process may lead to vigorous interest by OSHA in the effectiveness of protective clothing as well as in the performance of command and control and communications equipment.

A number of obstacles stand in the way of closer OSHA incorporation into SARA Title III, however. OSHA is a multiprogram agency that performs a number of tasks. Funding for these tasks often is not adequate to support the level of performance expected. Moreover, like other agencies, OSHA lacks integration into newer federal programs because it is concerned with attending to more pressing concerns (see Appendix A, Feldman 1989e). Despite these barriers, however, closer OSHA and EPA cooperation

on SARA Title III issues appears likely. This cooperation is not constrained by legal or administrative obstacles.

Another issue likely to become more important eventually is the liability of local institutions for emergency planning and response decisions. If local officials can be held liable for acquisition-related decisions, then it will be necessary to work within the SARA Title III structure to ensure that these decisions encompass all relevant constituencies and are widely discussed. It is not necessary for SARA Title III institutions themselves to engage in procurement, however. At CSDP sites where LEPCs work closely with local emergency managers on emergency management issues, LEPC participants generally include experienced emergency management or operations professionals. These LEPCs are usually chaired by skilled emergency managers or highly knowledgeable elected officials who have considerable experience with chemical accidents. In these situations, the LEPC becomes an effective arm of the local emergency manager, competent (in some instances) to participate in acquisition and procurement decision making.

Although LEPCs and SERCs are not competent to make acquisition decisions (nor do they have the authority to do so), their unique representation of community resources can be an asset in other respects. They may generate local community awareness of the need to assess emergency equipment needs, assist in regional and interjurisdictional coordination of acquisition-related issues, discuss ways of comprehensively integrating local equipment funding requests, and review standards and criteria guidelines provided by FEMA in order to ensure that equipment acquisition decisions for CSDP serve to upgrade response capabilities for all chemical emergencies.

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APPENDIX A

PERSONAL COMMUNICATIONS

**APPENDIX A
PERSONAL COMMUNICATIONS**

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Feldman, D. L., Oak Ridge National Laboratory, 1989a

April 24, 1990

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ORNL\TM-11138—*IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY
PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION
OF EMERGENCY EQUIPMENT*

Dear Pat:

Several months ago I interviewed you over the telephone as part of a study I conducted on the implications of SARA Title III for emergency preparedness in the U.S. Army's Chemical Stockpile Disposal Program. I want to provide you the opportunity to examine this final draft of a report based on that study.

It is important to me that your observations and insights were paraphrased accurately and correctly. I also welcome any comments you have on this draft before it is published. Please feel free to call me at (615) 574-1404 or (FTS) 624-1404.

I would appreciate hearing from you by June 1. In order to help expedite your review of this report, I have marked those pages which contain information based on my interview with you. Thank you for your time and insights.

Please sign the bottom and mail to me at

Oak Ridge National Laboratory
P. O. Box 2008, 4500N, MS 6206
Oak Ridge, Tennessee, 37831-6206

The second copy of this letter is for your files.

Sincerely,

David L. Feldman

DLF:cjc

Enclosure

Feldman, D. L., Oak Ridge National Laboratory, 1989b

April 24, 1990

Timothy Dowd
Technological Hazards Program Specialist
Federal Emergency Management Agency
1371 Peachtree Street, NE, Suite 700
Atlanta, Georgia 30309

**ORNL/TM-11138—IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY
PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION
OF EMERGENCY EQUIPMENT**

Dear Timothy:

Several months ago I interviewed you over the telephone as part of a study I conducted on the implications of SARA Title III for emergency preparedness in the U.S. Army's Chemical Stockpile Disposal Program. I want to provide you the opportunity to examine this final draft of a report based on that study.

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Oak Ridge, Tennessee, 37831-6206

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Sincerely,

David L. Feldman

DLF:cjc

Enclosure

Feldman, D. L., Oak Ridge National Laboratory, 1989c

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APR 27 1990

April 24, 1990

CHEMICAL & EMERGENCY
PREPAREDNESS PROGRAM
OFFICE

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Office of Chemical Emergency
Preparedness and Prevention
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**ORNLATM-11138-IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN
THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY
EQUIPMENT**

Dear David:

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Sincerely,



David L. Feldman

DLF:cjc

Enclosure

Signed:

David Napieraki FIS-353-3202 (MAIL CODE 545-26)

Date:

6-20-90

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FOR THE U. S. DEPARTMENT OF ENERGY

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April 24, 1990

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ORNL/TM-11138--IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY EQUIPMENT

Dear Dennis:

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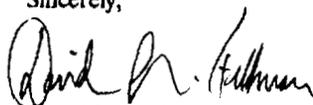
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Oak Ridge, Tennessee, 37831-6206

The second copy of this letter is for your files.

Sincerely,


David L. Feldman

DLF:cjc

Enclosure

Signed: Dennis J. Carney

Date: 4/27/90

Feldman, D. L., Oak Ridge National Laboratory, 1989c

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April 24, 1990

Kathy Bishop
Preparedness Staff
Office of Solid Waste and Emergency Response
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Waterside Mall
401 M Street, SW
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ORNL/TM-11138—IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY EQUIPMENT

Dear Kathy:

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Oak Ridge, Tennessee, 37831-6206

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Sincerely,

David L. Feldman

DLF:cjc

Enclosure

Signed: Kathleen Bishop

Date: 7/30/90

45

Feldman, D. L., Oak Ridge National Laboratory, 1989f

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April 24, 1990

Craig Pattani
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Federal Emergency Management Agency
Liberty Square Building, 2nd Floor
105 South Seventh Street
Philadelphia, PA 19106

ORNL/TM-11138—IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY EQUIPMENT

Dear Craig:

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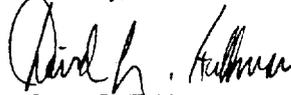
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P. O. Box 2008, 4500N, MS 6206
Oak Ridge, Tennessee, 37831-6206

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Sincerely,


David L. Feldman

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Enclosure

Signed: Craig Pattani

Date: JUNE 5 1990

Feldman, D. L., Oak Ridge National Laboratory, 1989g

April 24, 1990

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300 South Wacker Drive
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Chicago, Illinois 60606

**ORNL/TM-11138—IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY
PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION
OF EMERGENCY EQUIPMENT**

Dear Ann:

Several months ago I interviewed you over the telephone as part of a study I conducted on the implications of SARA Title III for emergency preparedness in the U.S. Army's Chemical Stockpile Disposal Program. I want to provide you the opportunity to examine this final draft of a report based on that study.

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Oak Ridge National Laboratory
P. O. Box 2008, 4500N, MS 6206
Oak Ridge, Tennessee, 37831-6206

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Sincerely,

David L. Feldman

DLF:ejc

Enclosure

Feldman, D. L., Oak Ridge National Laboratory, 1989h

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April 24, 1990

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**ORNL-TR-11150 - IMPROVEMENT OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN
THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY
EQUIPMENT**

Dear George:

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Oak Ridge, Tennessee, 37831-6206

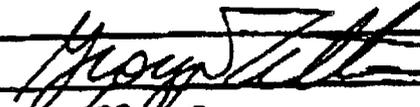
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Sincerely,

David L. Feldman

DLF:cjc

Enclosure

Signed: 

Date: 5/30/90

Feldman, D. L., Oak Ridge National Laboratory, 1989i

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POST OFFICE BOX 2008
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Gary Jones, Chief
Technological Hazards Branch
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APR 27 1990

ORNLATM-11138—IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY EQUIPMENT

Dear Gary:

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Oak Ridge, Tennessee, 37831-6206

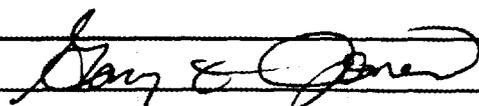
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Sincerely,


David L. Feldman

DLF:cjc

Enclosure

Signed: 

Date: 7-24-90

Feldman, D. L., Oak Ridge National Laboratory, 1989j

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POST OFFICE BOX 2008
OAK RIDGE, TENNESSEE 37831

April 24, 1990

Lawrence Wapensky, Chief
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One Denver Place
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**ORNL/TM-11138—IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN
THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY
EQUIPMENT**

Dear Lawrence:

Several months ago I interviewed you over the telephone as part of a study I conducted on the implications of SARA Title III for emergency preparedness in the U.S. Army's Chemical Stockpile Disposal Program. I want to provide you the opportunity to examine this final draft of a report based on that study.

It is important to me that your observations and insights were paraphrased accurately and correctly. I also welcome any comments you have on this draft before it is published. Please feel free to call me at (615) 574-1404 or (FTS) 624-1404.

I would appreciate hearing from you by June 1. In order to help expedite your review of this report, I have marked those pages which contain information based on my interview with you. Thank you for your time and insights.

Please sign the bottom and mail to me at

Oak Ridge National Laboratory
P. O. Box 2008, 4500N, MS 6206
Oak Ridge, Tennessee, 37831-6206

The second copy of this letter is for your files.

Sincerely,


David L. Feldman *df*

DLF:cjc

Enclosure

Signed: Lawrence A. Wapensky
Date: 7/2/90

Feldman, D. L., Oak Ridge National Laboratory, 1989k

OAK RIDGE NATIONAL LABORATORY
OPERATED BY MARTIN MARIETTA ENERGY SYSTEMS, INC.
FOR THE U.S. DEPARTMENT OF ENERGY

POST OFFICE BOX 2006
OAK RIDGE, TENNESSEE 37831

April 24, 1990

Robert Hite
Hazardous Materials Program Specialist
Federal Emergency Management Agency
Denver Federal Center, Building 710
Box 25267
Denver, Colorado 80225-0267

ORNL/TM-11128-~~11128~~ **IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY EQUIPMENT**

Dear Robert:

Several months ago I interviewed you over the telephone as part of a study I conducted on the implications of SARA Title III for emergency preparedness in the U.S. Army's Chemical Stockpile Disposal Program. I want to provide you the opportunity to examine this final draft of a report based on that study.

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Please sign the bottom and mail to me at

Oak Ridge National Laboratory
P. O. Box 2008, 4500N, MS 6206
Oak Ridge, Tennessee, 37831-6206

The second copy of this letter is for your files

Sincerely,

David L. Feldman

DLF:ejc

Enclosure

Signed: Robert Hite

Date: 7-30-90

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POST OFFICE BOX 2008
OAK RIDGE, TENNESSEE 37831

April 24, 1990

Andy Merget
Assistant Emergency Preparedness Coordinator
Environmental Protection Agency
1200 6th Avenue
Seattle, Washington 98101

ORNL/TM-11138—IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY EQUIPMENT

Dear Andy:

Several months ago I interviewed you over the telephone as part of a study I conducted on the implications of SARA Title III for emergency preparedness in the U.S. Army's Chemical Stockpile Disposal Program. I want to provide you the opportunity to examine this final draft of a report based on that study.

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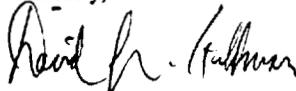
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Oak Ridge National Laboratory
P. O. Box 2008, 4500N, MS 6206
Oak Ridge, Tennessee, 37831-6206

Comments passed by
phone 5/4/90

The second copy of this letter is for your files.

Sincerely,



David L. Feldman

DLF:cjc

Enclosure

Signed: _____

Date: 5/4/90

Feldman, D. L., Oak Ridge National Laboratory, 1989m

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POST OFFICE BOX 2008
OAK RIDGE, TENNESSEE 37831

April 24, 1990

Bill Brown
Hazardous Materials Program Manager
and Emergency Management Specialist
Federal Regional Center
130 - 228th Street, SW
Bothell, Washington 98021-9796

ORNL/TM-11138—*IMPLICATIONS OF SARA TITLE III FOR COMMUNITY-BASED EMERGENCY PLANNING IN THE U.S. ARMY CHEMICAL STOCKPILE DISPOSAL PROGRAM: THE ACQUISITION OF EMERGENCY EQUIPMENT*

Dear Bill:

Several months ago I interviewed you over the telephone as part of a study I conducted on the implications of SARA Title III for emergency preparedness in the U.S. Army's Chemical Stockpile Disposal Program. I want to provide you the opportunity to examine this final draft of a report based on that study.

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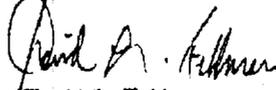
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Oak Ridge, Tennessee, 37831-6206

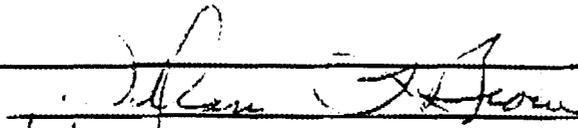
The second copy of this letter is for your files.

Sincerely,


David L. Feldman

DLF:cje

Enclosure

Signed: 

Date: July 30, 1990

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71. A. Whelan, Hazardous Materials Program Officer, Federal Emergency Management Agency, 300 South Wacker Drive, 24th Floor, Chicago, Illinois 60606
72. M. Williams, Professor, Department of Economics, Northern Illinois University, DeKalb, Illinois 60115