United States
Environmental Protection
Agency

Office of
Solid Waste and
Emergency Response

Publication 9375.6-08C
EPA540/R-94/008
PB94-963230
December 1993

Superfund

EPA

An Analysis Of State Superfund Programs

50-State Study
1993 Update

9375.6-08C
PB94-963230
EPA540/R-94/008

AN ANALYSIS OF STATE SUPERFUND PROGRAMS: 50-State Study, 1993 Update

December 1993

Prepared by the Environmental Law Institute

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Office of Emergency and Remedial Response
Hazardous Site Control Division
Washington, DC 20460

ACKNOWLEDGEMENTS

This report was prepared by the Environmental Law Institute under Cooperative Agreement No. CR-820593-01 with funding from the U.S. Environmental Protection Agency. Environmental Law Institute staff contributing to the report were Jamie Dycus, Katie Goldberg, Suellen Keiner, James McElfish, John Pendergrass, David Spohr, Lisa Vogel and Heather Wicke. Information on voluntary remediation programs was provided by Voluntary Remediation Profiles, prepared by Stateside Associates for General Electric, and the study's author, Mark Anderson. U.S. EPA staff were Ann McDonough and Murray Newton. The assistance of state program officials is gratefully acknowledged.

TABLE OF CONTENTS

Page No.

LIST OF ACRONYMS v
I. INTRODUCTION 1
II. DEVELOPMENTS IN STATE PROGRAMS 5
III. OVERVIEW OF STATE "SUPERFUND" PROGRAMS 7
A. Cleanup Activities and Capabilities 7
B. Statutory Authority 8
C. Hazardous Waste Sites 9
D. Program Organization 10
E. Funding 14
F. Cleanup Policies and Criteria 24
G. Public Participation 27
H. Enforcement 30
IV. VOLUNTARY REMEDIATION PROGRAMS 37
V. STATE PROGRAM TABLES 44
VI. STATE SUMMARIES 131
Region I 132
Region II 145
Region III 153
Region IV 166
Region V 183
Region VI 196
Region VII 207
Region VIII 216
Region IX 229
Region X 239

TABLE OF CONTENTS

TABLE

V-1 Overview of State Cleanup Programs and Capabilities 44

V-2 Statutory Authorities 48

V-3 Program Organization 53

V-4 Program Administration and Staff: Funding Sources 57

V-5 Hazardous Waste Sites 61

V-6 Funding Balances 64

V-7 Funding Sources 68

V-8 Expenditures & Obligations 72

V-9 Fund Uses 78

V-10 Cleanup Standards 82

V-11 Public Participation 85

V-12 Liability Standards 92

V-13 Penalties and Damages Available in State Superfund Statutes 95

V-14 Natural Resource Damage Assessment 99

V-15 Property Transfer Provisions 102

V-16 Federal-State Partnerships 105

V-17 Voluntary Remediation Programs: Key Administrative Procedures 108

V-18 Voluntary Remediation Programs: Authorities and Agreements 110

V-19 State Oversight of Voluntary Remediation Activities 115

V-20 Voluntary Remediation Programs: Sites and Cleanup Standards 120

V-21 Voluntary Remediation Programs: Public Participation, Liability, and Reopening Provisions 125

LIST OF ACRONYMS

AG	-	Attorney General
ARARs	-	Applicable or Relevant and Appropriate Requirements
ASTSWMO	-	Association of State and Territorial Solid Waste Management Officials
CA	-	Cooperative Agreement
CERCLA	-	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CERCLIS	-	Comprehensive Environmental Response, Compensation, and Liability Information System
CPCA	-	Core Program Cooperative Agreement
DSMOA	-	Department of Defense and State Memorandum of Agreement
ELI	-	Environmental Law Institute
FOIA	-	Freedom of Information Act
FTE	-	Full-time Equivalent
GAO	-	General Accounting Office
HRS	-	Hazard Ranking System
LUST	-	Leaking Underground Storage Tank
MCL	-	Maximum Contaminant Level
MCLG	-	Maximum Contaminant Level Goal
MSCA	-	Multi-Site Cooperative Agreement
NBAR	-	Non-Binding Allocation of Responsibility
NCP	-	National Oil and Hazardous Substances Pollution Contingency Plan
NPL	-	National Priorities List for Uncontrolled Hazardous Waste Sites
OGC	-	Office of General Counsel
O&M	-	Operation and Maintenance
PA/SI	-	Preliminary Assessment/Site Investigation
PRP	-	Potentially Responsible Party
RA	-	Remedial Action
RCRA	-	Resource Conservation and Recovery Act
RD	-	Remedial Design
RI/FS	-	Remedial Investigation/Feasibility Study

ROD	-	Record of Decision
RP	-	Responsible Party
RPM	-	Remedial Project Manager
SACA	-	Support Agency Cooperative Agreement
SARA	-	Superfund Amendments and Reauthorization Act of 1986
SMOA	-	Superfund Memorandum of Agreement
SSCA	-	Site Specific Cooperative Agreement
TAG	-	Technical Assistance Grant
UST	-	Underground Storage Tank

CHAPTER I
INTRODUCTION

In the thirteen years since passage of the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA, generally referred to as Superfund), the enormity of the problems associated with hazardous waste sites and their cleanup has become overwhelmingly apparent. Coordinated cleanup efforts between Federal and State authorities are currently addressing numerous sites targeted by the U.S. Environmental Protection Agency's National Priorities List (NPL). This is the list of uncontrolled substance releases in the United States that are priorities for long-term remedial evaluation and response. Still, a vast number of known or suspected waste sites do not meet the criteria for inclusion on the NPL and, if they are to be addressed, they will have to be cleaned up by the States. In certain cases States may feel compelled to respond in a manner that is more stringent or timely than might be possible in joint Federal-State efforts. Where joint efforts are required, Federal and State authorities need to ensure that their actions are mutually supportive but not duplicative. For these reasons, the role of the States in addressing hazardous waste sites, independently and in concert with the Federal government, will become increasingly important as the numbers of both NPL and non-NPL sites grow.

States are currently responsible for oversight, enforcement, and/or funding cleanups at non-NPL sites; at NPL sites, their role ranges from required cost sharing at Federal Fund-lead cleanups to State-lead action in site activities. The prospects for increasing State involvement at both NPL and non-NPL sites depend on the willingness and capacity of States to develop effective programs, obtain adequate resources to fund cleanups, take enforcement action to ensure private cleanups, and conduct oversight activities.

A key step in enhancing the Federal-State partnership on Superfund is to understand the States' own cleanup or superfund programs aimed at NPL and non-NPL sites. This is the objective of the present report, which updates the results of a study initially conducted in 1989, and updated in 1990 and 1991, by the Environmental Law Institute (ELI) for the U.S. Environmental Protection Agency's Office of Emergency and Remedial Response, Hazardous Site Control Division, State and Local Coordination Branch. The study examines site cleanup programs in all 50 States, plus the District of Columbia and the Commonwealth of Puerto Rico, and provides descriptions of their statutes, program organization, funding, and cleanup procedures.

Purpose of the Study

Under the Superfund Amendments and Reauthorization Act (SARA) of 1986, Congress requires EPA to involve States in the Superfund program in a "substantial and meaningful" way. EPA's State and Local Coordination Branch (SLCB) is responsible for developing regulations, guidance, and policy related to this Congressional mandate. As part of its responsibilities, the SLCB tries to maintain comprehensive information about State capabilities to contribute to or manage cleanups at hazardous waste sites. Under a cooperative agreement with EPA, ELI has collected, organized, and summarized the information presented here on the 52 State cleanup programs.

Research Methodology

To ensure that the information for this report would be complete, accurate, and up to date, the ELI project team spent several weeks gathering and analyzing research reports, statutes, regulations, and other State documents, interviewing State program staff by telephone, and confirming information for each State. ELI initially reviewed both information gathered for the prior versions of the report and newer information concerning State cleanup programs as found in State documents, legislative reporting services, newsletters, and EPA documents. A detailed request for updated program information was sent to each State, along with a general request for copies of any relevant legislative amendments or State reports. In addition to the States' written responses, ELI received a variety of materials from the States, including annual program status reports, legislative amendments, program descriptions, policy statements, and regulations.

ELI then conducted telephone interviews to clarify written responses and reconcile any discrepancies in the data. This new information was used to update the two-page summaries of State programs. ELI then sent each State program office the 1993 summary for that State for review; appropriate changes were made in response to State officials' corrections. The State program tables were compiled with the verified State information.

Table V-18, which lists the cooperative agreements that States have signed with U.S. EPA, is the only table based on information supplied by EPA rather than the States.

The special topic discussion and tables on State voluntary remediation programs are based on data presented in the study "Voluntary Remediation Profiles" prepared for General Electric by Stateside Associates in August 1993. The information presented in this study was obtained from the States by extensive telephone interviews and analysis of written materials provided by the States. Due to the timely and thorough nature of this analysis, ELI and EPA decided to avoid a redundant effort and obtained permission from Stateside Associates to use their profiles for the purposes of this report. General questions on State voluntary remediation activities were included in the ELI State program survey form to obtain additional information and verify the Stateside Associates data.

Organization of the Report

The report is divided into three discussion chapters, one chapter devoted to tables of aggregate data, and a final chapter of State program summaries. Chapter II highlights the most noteworthy developments in State capabilities that emerged in comparing the 1993 information with the previous reports. An overview of State superfund programs is provided in Chapter III. This overview examines statutes, program funding and organization, cleanup sites and activities, cleanup policies and criteria, public participation requirements, and enforcement tools. Chapter IV discusses the States' voluntary remediation programs. Chapter V presents program information arranged in tables that facilitate comparisons between States. Chapter VI contains the two-page summaries for each State program. For

the few States that do not have superfund programs, the summaries focus on States' capabilities to address hazardous waste sites using other authorities and resources.

In assembling this report, ELI has tried to take a "snapshot" of State cleanup programs, while recognizing that they are in a dynamic state and that changes may occur after the publication of this update. For the purposes of this report, we have used State information that was available on or before December 3, 1993. States were provided an opportunity to review and update all of the information in the State program summaries.

Comparison of State Data

There is significant interest in State programs due to the pending reauthorization of the Federal Superfund statute. The information in this report will, therefore, receive increased scrutiny and use. In light of this, it is important to acknowledge the limits to use of this data to make direct comparisons of state programs. Differences in state program terminology, administrative and accounting procedures, and the detail of State responses to ELI's survey make such comparisons uncertain. There may also be significant discrepancies between the information presented in this report and in other current State program reports. This is due not only to the aforementioned factors but also to the precise program questions asked and the number of State respondents.

Therefore, the most appropriate comparisons of State programs to be made with the information presented in this report are relative cleanup program capabilities and activity levels, differences in the general types of cleanup authorities and policies applied, and similarities in approaches which suggest policy trends. The following two chapters provide a discussion of State program developments and similarities and differences in State cleanup approaches. Table V-1 provides an overview of key program elements of the States programs.

CHAPTER II
DEVELOPMENTS IN STATE PROGRAMS

The extent of the States' involvement in the remediation of contaminated sites depends upon the development of funding and program capability. A comparison of the data from 1989, 1990, 1991, and 1993 shows that State programs have increased their cleanup capability. The following bullets provide an overview of the States' involvement and capability during fiscal year 1993 (FY93).

- The number of States that have cleanup funds and enforcement capabilities has increased from 39 in 1991 to 45 in 1993.

- Overall program staff levels remained relatively constant, increasing less than three percent from 3,394 in 1991 to 3,491 in 1993. There were some significant changes for a number of states -- for example, Nevada, Rhode Island and Texas more than doubled their staff totals. Total legal support was 247 FTE attorneys, down slightly from 262 in 1991.

- States are relying more on cleanup funds for program funding and less on State general funds. The number of States using cleanup funds for program support increased from 33 in 1991 to 39 in 1993. The corresponding number for State general funds dropped from 33 to 27.

- State cleanup funds had a combined balance (including bond authorizations) in excess of $1.5 billion, down substantially from over $2.2 billion in 1991. During FY93, over $700 million were expended for cleanup activities and over $450 million obligated for future activities. Total additions to State cleanup funds during the last fiscal year were $957.3 million, a 150% increase from 1990.

- Thirty-six States reported the use of State site inventories or priority lists, an increase of eight States since 1991. The total number of sites on State site inventories or priority lists has increased by 39% since 1991, to over 20,000 sites.

- Forty States, an increase of 16 States since 1991, reference ambient or background quality in determining cleanup levels.

- The number of States with public participation requirements has increased slightly. A total of 45 States now have public participation requirements, up from 43 in 1991. Of these, 24 States have statutory or regulatory public participation requirements, up from 22 in 1991.

- The number of States with specific requirements for basic public participation practices has also increased. A total of 35 States provide public notice of identified sites or completed remedial actions plans, and 23 States solicit public comments

during the site handling process. Thirty-five States have provisions for public meetings or hearings, up from 27 in 1991. About six States currently make use of citizen advisory groups in planning cleanups and revising cleanup policies.

- States have continued to strengthen their enforcement and cost recovery capabilities. Twenty-five States now provide for punitive damages -- up from 24 in 1991, 23 in 1990, and 22 in 1989. Each of the new State statutes enacted since these reports began has adopted the strict, joint and several liability standard. Thirty-two States use this standard; six of these allow some apportionment, however. Only four States specify a proportional liability standard.

- Twenty-five States report that they have natural resource damages programs, a substantial increase from 1991, when many programs were only under consideration or development. States have recovered a combined total of more than $126,944,372 in natural resource damages claims since the start of their NRD programs. Six States reported a total of $514,500,000 in pending NRDs claims.

- The number of States with property transfer provisions has increased significantly since the 1991 update. Twenty-three States have such provisions, up from 18 in 1991. These provisions have assisted private parties in ensuring that they incur no unexpected liabilities when acquiring property; they have also helped in identifying sites where remediation may be required.

These few statistics are among the more outstanding indicators of the breadth and vitality of the State program effort. A close examination of the information contained in this updated report will lead to a fuller understanding of the cleanup programs that are developing as the States continue to address the contaminated sites within their borders. More detailed information on all aspects of State cleanup programs is presented in the following chapter.

CHAPTER III
STATE "SUPERFUND" PROGRAMS

Most States have established programs to address the risks posed at sites contaminated by hazardous substances. The majority of the State programs have authorities and capabilities similar to the Federal Superfund program. For the purposes of this study, a State "superfund" or cleanup program has some or all of the following characteristics:

1) Procedures for emergency response actions and more permanent remediation of environmental and health risks;

2) Provisions for a cleanup fund or other financing mechanism to pay for studies and remediation activities;

3) Enforcement authorities to compel responsible parties (RPs) to conduct or pay for studies and/or site remediation; and

4) Staff to manage State-funded remediation and to oversee RP-conducted remediation.

5) Procedures for public participation in decision-making on site cleanup.

This chapter presents detailed information on State programs for all 50 States, the District of Columbia, and the Commonwealth of Puerto Rico. For convenience in discussion and in the tables accompanying this report (see Chapter V), these are all referred to as "States." Totals, therefore, include 52 "States". This chapter highlights similarities and differences among State statutes and programs in areas such as cleanup and oversight capabilities, number of sites addressed, staffing, funding, enforcement authorities, cleanup standards, and public participation.

A. Overview of Cleanup Activities and Capabilities

One of the purposes of this report is to provide an updated assessment of the States' efforts and capabilities in addressing sites contaminated by hazardous substances. The nature and level of State efforts may vary because of changes in State funding from year to year, and the continuing enactment and amendment of legislation by the States. All but two of the States (Nebraska and the District of Columbia) have some public funding capability. Funds in a few other States are quite small and often limited to emergency response or removal actions. Most States have enforcement capabilities; however, not all have enforcement authority associated with their State superfund programs. A number of States rely on enforcement authorities in other State statutes, such as solid and hazardous waste laws, groundwater protection laws, or general environmental protection laws. Public participation in the cleanup process is established by regulation or policy in forty-four states. Table V-1 presents an overview of State program elements.

B. Statutory Authorities

Table V-2 summarizes the many cleanup statutes and related environmental laws enacted by the 50 States, plus the District of Columbia and Puerto Rico, for the purpose of addressing hazardous waste sites. In some States with comprehensive cleanup statutes, these laws include State response funds, enforcement authorities, priority lists, provisions governing property transfers, remedy selection criteria, and victim compensation and citizen suit provisions. In other States, authorities for a cleanup program and enforcement may be contained in statutes separate from laws creating a State response fund or establishing site cleanup standards.

Since the 1991 Update, there has been a significant increase in the number of States that have cleanup funds and enforcement capabilities. Two years ago there were 39 States with funding and enforcement authorities; now there are 45. There still remain seven States that either have (1) funds limited to emergency responses and/or CERCLA share or (2) enforcement provisions that are contained in other statutes not specifically intended for cleaning up hazardous waste sites. Except for the District of Columbia and Nebraska, all States have some sort of cleanup fund or other account that can be used by the State for various types of cleanup expenditures. See Section E and Table V-11 for more detail on the uses of cleanup funds.

A significant number of States have adopted new legislation during the past two years, enacting either cleanup laws in the image of CERCLA (Georgia and Oklahoma) or significant amendments to their prior cleanup laws (Connecticut, Maryland, New Mexico, and Tennessee). Several States recently adopted new or additional property transfer restrictions (Georgia, Maine, and Mississippi). A total of 23 States now have property transfer provisions (not including those with only superliens or data bases). In addition, two more States have now enacted authorities for developing priority lists for State sites which will determine the order in which cleanups should occur (Georgia and Tennessee), for a total of 26 States with priority lists.

No new State citizen suit provisions were passed during the past two years. These laws allow individuals who may be adversely affected by actual or threatened releases of hazardous substances to file civil actions in State courts against the responsible parties, either enjoining them from further damage and/or requiring them to take corrective action to clean up or prevent the release.

One State (Iowa) adopted new provisions for compensating victims of hazardous waste releases. Now there are 15 States that provide for victim compensation, although 10 of those States limit their reimbursements for victims to the costs of obtaining either temporary or permanent alternative water supplies.

C. Hazardous Waste Sites

There is great variation in estimates of the numbers of hazardous waste sites in each of the States. Despite the uncertainty surrounding estimates of existing sites and the risks that they pose, the number of sites reported can be indicative of the level of a State's program activity, as well as of the need for future cleanups.

Table V-5 gives the numbers of final, proposed, and deleted NPL sites in each State, as well as figures for non-NPL sites. Non-NPL sites are shown in three ways, for differing purposes. The number of "Known and Suspected State Sites" is generally the largest number of contaminated sites known to the State. It is most likely to be an estimate, and in many States, the figure includes sites that have not yet undergone any type of assessment. In cases where this number is not available from the State, the number reported on Table V-5 has been taken from CERCLIS, a database maintained by EPA.

State sites "identified as needing attention" are a subset of "known and suspected" sites. These are sites that have been evaluated by the State and determined to require some level of cleanup or further evaluation. This number is probably the best indicator of the workload that each State's cleanup program actually faces.

The third category is the "State Inventory or Priority List." Although each State's law attaches its own meaning to the inventory or priority list required, generally these lists indicate that the sites have undergone an additional level of analysis by the State. Often this list requires priority designation of sites through ranking, scoring, or some other formal screening procedure, and includes those sites identified as cleanup priorities.

The number of known and suspected non-NPL sites in States ranges from zero (District of Columbia) to 26,000 (California). The number of known and suspected non-NPL sites has increased by approximately 38% since 1991, to a total of over 100,000 sites in 1993. The number of sites identified by States as needing attention ranges from zero (District of Columbia) to 12,894 (New Jersey). The total number of non-NPL sites identified by States as needing attention has increased by almost 220% to over 40,000 sites, reflecting in part the increase in the number of States (from 30 in 1991 to 43 in 1993) reporting figures for the needing-attention category. The data show that States are increasingly identifying non-NPL sites and spending resources to classify the risks presented by these sites, in order to designate cleanup priorities and expedite remediation.

Twenty-six States are required by law to create and maintain inventories or priority lists of sites. A number of others maintain such lists. This year, 36 States reported a number for sites on a State inventory or priority list, a significant increase over the 28 States reporting data for that category in the 1991 study. Priority lists required by laws in Hawaii and Georgia are currently being developed. Illinois previously had a priority list which had been developed under regulation; however, the list was voided by State court order in 1992. The total number of sites on State inventories or priority lists has increased by 39% since the 1991 study to over 20,000 sites in 1993.

The numbers of sites listed in each State are not always comparable. States use different criteria to determine placement on lists or in certain categories. Connecticut is required by law to retain fully remediated sites on its inventory; and in New York, some fully remediated sites are delisted while others remain on the State Registry. Vermont includes all petroleum cleanup sites on its list of hazardous waste sites. The South Dakota list categorizes sites as open or closed; open sites are known and suspected sites that have neither been fully remediated nor classified as requiring no action.

In six States the number of sites classified as needing attention is smaller than the number of sites on the inventory or priority list for various reasons. In Maine and Louisiana, for example, the inventories include all sites that have been the subject of a citizen suit complaint about possible contamination; and in New York, all sites identified by counties are included on the list. Not all of these sites will necessarily be confirmed by the States as sites requiring attention.

In most cases, inventories and priority lists include State sites listed on the NPL. Some States, such as Connecticut, keep a registry that includes NPL sites as well as a sub-list of State-lead NPL sites. Maryland compiles a Disposal Site Registry which is a list of ranked sites, including NPL sites, requiring remedial action.

Not all States with inventories have a formal site ranking system. Many, however, do categorize sites using one of several systems, including the Federal Hazard Ranking System (HRS II), modified HRS II, and other non-quantitative systems. HRS II, the ranking system that is used to determine the National Priorities List, was developed by the EPA and implemented in 1990. It includes an evaluation of factors such as surrounding population, groundwater, and wind patterns that is more extensive than the original HRS system.

A number of States have modified the HRS II system for their specific needs. The Michigan Site Assessment Model (MSAM) differs from HRS II in several ways, including fire and explosion potential factored into the numerical score. New York has developed a scoring system that combines three ranking systems: HRS, a State-developed Health Ranking Model (emphasizing human exposure), and a State-developed Biothreat Ranking Model (emphasizing natural resource damages). Montana uses a non-quantitative ranking system based on five factors; 1) contamination of a drinking water supply, 2) air contamination that may pose a health threat, 3) contamination of surface waters that provide recreation and drinking water, 4) impacts on wildlife, and 5) danger of fire or explosion.

D. Program Organization

Administration of a State's program to clean up hazardous waste sites is almost always handled by the State agency with primary responsibility for environmental matters. The responsible agency's entire focus may be on environmental protection, as is the case with Connecticut's Department of Environmental Protection, or its duties may be broader, as is the case with South Carolina's Department of Health and Environmental Control. Table V-3 lists the responsible agencies for the 52 "States", and the divisions within these agencies that administer the State's cleanup programs, as well as staffing levels. Many

States have established a hazardous waste management division with cleanup personnel. The organization of each State cleanup program is unique, however, and it is difficult to make generalizations concerning program administration. The examples highlighted below represent some of the more noteworthy organizational features of the States' hazardous waste cleanup programs.

Divisions Within Programs

Many States' cleanup programs are divided into units, each with responsibility for a different program element. For example, the roughly 60 FTE staff in Florida's Bureau of Waste Cleanup are divided into 5 sections: Hazardous Waste Cleanup (15); Preliminary Assessment (8); Site Investigation (14); Technical Support (17); and Enforcement (6). In Virginia, 3 divisions of the Office of Superfund Programs deal with site cleanup: The Federal Facilities Program (4); Site Assessment Program (7), and Superfund Remedial Program (10).

Staffing Levels

The number of personnel devoted to site cleanup varies greatly, from the approximately 640 people in New Jersey's Site Remediation Program, to Wyoming, which does not have a formal superfund program. Program staff levels are indicated on Table V-4. The total number of State personnel working on the State cleanup programs remained relatively constant, increasing slightly from 3,394 in 1991 to 3,491 in 1993. In the past 2 years, there have been some dramatic changes in staffing levels for individual states, however. Nevada, for example, reported 24 FTE staff, up from 3 in 1991, while Rhode Island and Texas more than doubled their staffs.

Ten States employ more than 100 people working on cleanup activities: California, Massachusetts, Michigan, Minnesota, New Jersey, New York, Ohio, Pennsylvania, Texas, and Washington. Only 4 States have staff levels between 51 and 100 people: Florida, Illinois, Oregon, and Wisconsin. The bulk of the States, 30, have between 11 and 50 personnel. Only 8 States (Arkansas, District of Columbia, Georgia, New Hampshire, North Dakota, Puerto Rico, South Dakota, and Wyoming) have 10 or fewer people assigned to their Superfund programs, down from 11 such states in 1991.

Some of the variations between individual State numbers for both attorneys and overall staffing may result from differences in the ways in which States account for personnel, such as including or excluding individuals who work exclusively on Federal sites. New York, for example, includes approximately 22 staffers funded solely by Federal monies. In many States, staff members assume multiple duties both within and outside of the cleanup program, and State officials are often unable to indicate the precise percentage of time that those personnel devote to cleanup activities.

PROGRAM STAFF LEVELS	
Number of Personnel	Number of States
Over 100	10
51-100	4
11-50	30
0-10	8

Intra-Agency Activities

In a number of States, other divisions within the responsible agency provide support to cleanup personnel. For example, in Massachusetts, the Bureaus of Waste Prevention and Resource Protection provide support to the lead Bureau of Waste Site Cleanup. Air quality and water quality divisions of State agencies are often consulted by their counterparts in cleanup divisions regarding cleanup standards. Cleanup programs must also coordinate their activities with other elements of the States' hazardous and solid waste programs.

Inter-Agency Activities

Most States report that their agencies with primary responsibility for site cleanup rely upon other units of State government for assistance. In California, for instance, the Water Quality Resources Control Board has asserted jurisdiction over some remediation activities, undertaking cleanups for certain groundwater contaminations. In Maine, the DEP works with the State's Bureau of Health in conducting risk assessments and lab work. In most states, the Attorney General's (AG's) Office handles court actions, as discussed below under Legal Support.

Legal Support

Approximately 247 attorneys were reported by the States to be working on waste cleanup issues, a slight decrease from 262 reported in 1991. The numbers for individual States are rather small. Only California (30), Colorado (14), Massachusetts (20), New Jersey (28), New York (25), and Pennsylvania (18) reported more than 10 FTE attorneys providing legal support. In many States, the attorneys assigned to handle superfund cases also handle other types of cases.

The State AG's Office (or its equivalent) is the sole source of legal support for the cleanup program in 23 States, while in 14 State agencies the department's own legal personnel provide the sole legal support for State programs. The remaining 15 States rely upon a combination of attorneys from both the AG's Office and the responsible agency.

Vermont uses attorneys from its AG's Office, the Department of Environmental Conservation, and one attorney from its own superfund program staff. Table V-3 presents sources of legal support for the States.

Generally, where legal support duties are split between the AG's Office and the agency responsible for cleanup, such as in Iowa, the agency legal staff provides support on administrative enforcement issues, such as review of administrative consent orders or assessment of administrative penalties. When a case requires the initiation of a lawsuit, as in an action for cost recovery, it is usually referred to the AG's Office.

Funding Sources

There are three basic sources of funding for the States' program costs: State cleanup funds, State general funds, and Federal grants. The funding sources used by the States are presented in Table V-4. Since 1991 there has been a general trend towards more reliance on specific cleanup funds. The number of States using State general funds for support dropped from 33 to 27, while the number of States using State cleanup funds increased from 33 to 39. For example, Georgia, which in 1991 drew program support funding only from federal and state general funds, now reports that it receives 100% of its program administration funding from its new Hazardous Waste Trust Fund.

All but four States fund their program staffs through a combination of Federal grants and State monies. Georgia and Pennsylvania rely solely on State cleanup funds, while the District of Columbia relies solely on Federal funds. Idaho relies on Federal funds and collections from responsible parties. State funding is obtained solely through general fund appropriations in 11 States, while 21 States rely upon their separate site cleanup funds for the State share of administrative and personnel costs. The remaining States use both general fund appropriations and cleanup fund monies to pay the State share of staff and administrative costs. Some States pay for program administration and staff using additional funding sources (marked "Other" on Table V-4), which include fees, cost recoveries, and specific grants.

Federal-State Partnerships

There are several types of agreements made between Federal and State agencies pertaining to the funding and conduct of Superfund cleanup activities. These are: Site Specific Cooperative Agreements (SSCAs), which enable the use of Federal funds for site-specific activities at a State-lead NPL site; Support Agency Cooperative Agreements (SACAs), which provide Federal funding to enable States with limited staff to provide oversight assistance on EPA-lead sites; and Core Program Cooperative Agreements (CPCAs), which are available to fund program administration activities not associated with a specific site.

A Superfund Memorandum of Agreement (SMOA) documents the responsibilities and procedures assumed by the EPA and a State as regards Superfund activities. A SMOA may cover broad and specific implementation issues such as project review schedules, the sharing of documents, and site-lead responsibilities. Unlike cooperative agreements, SMOAs do not provide funding for State activities.

Table V-16 lists the SSCAs, CPCAs and Superfund Memoranda of Agreement (SMOAs) between the States and the U.S. Environmental Protection Agency. This data was obtained from U.S. EPA. No compilation of SACAs was available. For fiscal year 1993, only Alabama, the District of Columbia and Hawaii did not have SSCAs. The number of States with SSCAs was 48, more than double the 1991 total of 22 States. All but four of the States (District of Columbia, Florida, North Dakota, and Wyoming) had CPCAs. Eighteen States have a SMOA, the same number as in 1991.

E. Funding

A fund is an essential element of a State's program to clean up sites, as it allows a State to investigate, plan, design and conduct emergency response and remedial actions at sites where immediate action is required or where RPs are unavailable, unable or unwilling to conduct or pay for remedial actions. At orphan sites, where no RPs can be found, the fund will be depleted as money is spent for cleanup activities and must be replenished. A State may also incur certain expenses that it is not authorized to recover from RPs, including some administrative costs. If RPs refuse to cooperate on cleanups, a State uses a fund to pay for the necessary actions, and will typically attempt to recover those costs from RPs.

A fund also allows a State to control the pace of cleanups; if RPs fail to cooperate, the State is able to clean up the site without delay using its own funds. In addition to recovering its costs, the State may be authorized in such situations to seek punitive damages from the RPs that refused to conduct or pay for the cleanup. In order for a State to maintain this control over when sites are cleaned up, it must have enough money available to pay for whatever cleanup activities become necessary. There should also be money available to handle responses to emergencies and to pay for unexpected expenses such as cleanup activities at sites where anticipated agreements with RPs are not reached. Having a fund that is large enough to cover these contingencies, including potentially paying for the entire cost of one or more site cleanups, allows a State to control which sites and risks are cleaned up at what times.

A State fund can also be a significant contributor to a State's cleanup enforcement program. If the State can clean up a site with State funds and recover its costs in a timely manner, then RPs may decide that it is in their interests to agree to conduct future cleanups. Thus, States have been very successful in obtaining RP agreements to fund or conduct cleanups by being able to make a credible threat that if the RPs do not finance the cleanup the State will perform the work and promptly recover the costs from the RPs.

The amount of money needed to make such action credible obviously depends on the number of sites and types and expense of cleanup actions needed in the State. The experience of other States indicates that completing a remedial action at a single site is likely to cost more than one million dollars. Thus, for most States, particularly those with multiple sites needing permanent remedies, a fund of more than one million dollars would be needed to preserve the option of conducting a State funded remedial action at a site while maintaining the ability to respond to emergencies. Some States have considerably less than a million dollars available for cleanups and these States have, therefore, typically only been able to pay for emergency response and removal actions with their funds.

Fifty States have established cleanup funds or provided a mechanism for the State agency to pay for one or more types of cleanup activities at non-NPL sites. Nebraska and the District of Columbia are the only States without authorized cleanup funds. This is unchanged from 1991. Table V-6 lists the States' funds, their balances as of the end of the State's fiscal year (some States provided current balances), the date for that balance, and how much money was added to the fund during the fiscal year. Not all State funds or funding mechanisms are listed in Table V-6. Funding instruments that are used solely as repositories for federal monies or are available only for cleanup of leaking underground storage tanks have been excluded.

Twenty-two States have more than one fund for cleaning up sites contaminated by hazardous substances. This is an increase of four since 1991 and is seven more than in 1989. A State may have multiple funds in order to differentiate sources or uses of the funds. One fund may receive all the proceeds from a hazardous waste fee while another is the repository for other authorized types of funding, typically appropriations, penalties, and cost recoveries. For example, Arkansas' Hazardous Substances Response Trust Fund receives most of its funding from fees on hazardous waste generators, while its Emergency Response Fund is funded by civil penalties (the ERF is capped at $150,000 and excess penalties are deposited in the HSRTF). States may also have multiple funds because they separate the uses to which their funds may be put. Thus Ohio has both a Hazardous Waste Facility Management Fund, which may be used for emergency response and the State's CERCLA share of NPL remedial actions, in addition to its primary RCRA-related purposes, and a Hazardous Waste Cleanup Fund that may be used for all other non-NPL related cleanup activities.

The States vary considerably in their funding sources and authorized uses of funds and these characteristics are described in Tables V-7 and V-8, respectively.

A key issue for State and federal policymakers is the extent of the States' capabilities to clean up non-NPL (and potentially NPL) sites. The States have identified over 40,000 sites as needing some type of cleanup. Clearly, the States will rely on RPs to perform or pay for the cleanups of most of these sites, yet just as surely the risks at some sites will be addressed only if the State conducts and finances the cleanup itself. A State's capability to perform cleanups is determined by many factors, including staffing, expertise, experience, funding, and expenses. This section discusses the financial measures of State capabilities.

Fund Balances and Additions

Analysis of fund balances at the end of a State's fiscal year and the amount of money a State has added to the fund during the past fiscal year is intended to provide a sense of the State's capability to pay for cleanups in the near future. The fund balance is a measure of the current availability of funds for new work. This is supplemented by the additions to the fund, which serve as a measure of the State's immediate past capability to sustain the fund and is intended to provide a sense of the State's potential to maintain and increase the fund in the future. Both measures are flawed and, even considered together, do not necessarily provide a complete or accurate sense of State financial capabilities to pay for future cleanups. This is particularly true if comparisons are made among the States. Some of the issues are:

1. Fiscal year-end balances could not be obtained for all funds or all States -- Alaska and Wyoming could provide no balance information and the balances cited for two of Maine's funds are from December 1992.

2. Fund balances may be artificially low because of infrequent collection of fees or taxes, timing of appropriations (some States use biennial budget and appropriation cycles), or a program's need to exhaust its fund at the end of the fiscal year because carryover is not allowed.

3. Some States continue to rely on site-specific appropriations for remedial actions, despite the existence of a cleanup fund. In that case the State's ability to pay for cleanups may be less predictable.

4. A portion of a State's fund balance may be obligated for future work on sites currently in the system and thus all of the fund balance will not be available for work on new sites.

With these caveats, the total of the balances, including bond authorizations, for all the States' funds is $1.52 billion, and excluding the bonding authority available in four states (Massachusetts, Michigan, New York, and Wisconsin) is $556.2 million. The latter balance, excluding bond authorizations, may be more representative of States' capabilities to pay for cleanups in the near future if there is a substantial delay in selling the authorized bonds, receiving the proceeds and being able to spend that money. The balance excluding bond authorizations is $47.5 million less than the comparable balance in 1991, a decrease of 7.9%, following a decrease of 13.7% from 1990 to 1991.

This trend of declining balances is also reflected in the amount of bonding authority available to States. In 1993 four States were authorized to issue $967.2 million in bonds to be used for cleanup, a decrease of two States and $647.6 million since 1991. Bond authorizations have been steadily declining since the first 50-State Superfund Study in 1989 reported a total of $1,981 million in authorized bonds. Most of this decline is due to the fact that the States have been issuing the bonds and spending the proceeds on cleanups as was intended. New Jersey and New York have each issued hundreds of millions of dollars of bonds and spent the money on cleanups in the past few years. Massachusetts, Michigan,

Wisconsin and New Hampshire have also been spending down their bond authorizations and no State has added bonding authority since 1991.

Despite the overall decline in funding since 1991, the distribution of fund balances has moved upward, with more States moving into the middle levels of fund balances than in the past. This year nine States have balances (including bond authorizations) of less than $1 million, with two of those (Nebraska and the District of Columbia) having no fund at all, compared to 13 in 1991. Fifteen States have balances from $1 million up to $5 million (1 more than in 1991), 11 States have balances from $5 million to $10 million (6 more than in 1991), 12 States have balances from $10 million to $50 million (2 less than in 1991), and 3 States have balances of $50 million or more (1 less than in 1991). Thus, most (26 of 50 States reporting balances) States have fund balances between $1 million and $10 million, and more than two thirds of them have balances between $1 million and $25 million.

The total amount of money in fund balances, however, continues to be concentrated in a few States. The 7 States with fund balances (including bonds) exceeding $25 million have $1282.9 million or 84.2% of the total State superfund balance, and the 15 States with Funds of at least $10 million have balances totalling $1412.3 million, fully 92.7% of the total for all States. This is a slight decline from prior years when the Funds with balances of $10 million or more (including bonds) comprised 96% (1991), 97% (1990), and 96% (1989) of the total State fund balance. In 1993 there were 15 States with balances of $10 million or more compared to 18 States in that group in 1991, 17 in 1990 and 11 in 1989.

The concentration of funding is actually even greater, since just three States, New York, New Jersey and Pennsylvania, control $1127.4 million or 74% of the total balance available to States. This is actually a decrease from 1991, however, when four States with balances exceeding $50 million represented 84% of the total.

In contrast to the decrease in total Fund balances, States have dramatically increased their annual contributions to those funds. Forty-six States (of 48 reporting financial information) added $957.3 million to their cleanup funds during fiscal year 1993. This is a 150% increase ($575.7 million) over the $381.6 million reported by 36 States in 1991. Much of this rise in annual infusions to State funds can be attributed to New Jersey, where annual additions rose from $19.4 million in 1991 to $350.1 million in 1993. Of this amount, $239.5 million was added to the Bond fund, presumably from a sale of bonds, which may not be repeated in the future. Even excluding the bonds, though, New Jersey's additions in 1993 were substantial and significantly more than in 1991.

Other States that raised their annual additions by significant amounts include Texas (up from $20 million to $112.3 million), Michigan (too variable to estimate in 1991, added $78.9 million in 1993), and California (up from $50 million to $107 million). On the other hand, Pennsylvania's additions decreased from $89 million to $45.6 million, and Alaska did not report any amount this year but in 1991 estimated that annual additions could be as much as $50 million.

As with fund balances, the amounts added to funds are concentrated in a few States, with five adding more than $50 million (up from only one State in 1991). Seven States

reported annual additions to their funds in the range from $10 million to $50 million (this number was the same in 1991, though it referred to different States). Ten States reported adding less than $1 million to their funds in 1993 (up from nine States in 1991).

Sources of Funds

Table V-7 indicates the sources of funding for State funds and classifies each source as a major (contributing more than 20% of the Fund's revenues) or minor source. Nine types of sources are listed, including appropriations from the legislature, bonds, cost recovery, fees charged for hazardous waste or other activities, interest on fund or other State investments, penalties or fines, private funds, transfers from other funds or accounts, and taxes. Where it was not possible to classify a source as major or minor, an "X" was marked in the appropriate column.

Eighty funds exist in the 50 States that have funds for cleaning up sites contaminated by hazardous substances. This does not include funds that receive only federal monies or funds restricted solely to cleaning up contamination from leaking underground storage tanks. The following chart shows both the number of funds and the number of States that derive funding from each of the nine types of sources, and indicates whether each is a major or minor source of funding. The 1991 numbers are provided for comparison purposes.

SOURCES OF FUNDS

	Major Source For:				Minor Source For:			
	No. of Funds		No. of States		No. of Funds		No. of States	
	1992	1993	1991	1993	1991	1993	1991	1993
Fees	25	26	22	25	6	9	6	7
Appropriations	19	21	17	17	15	10	15	8
Penalties/fines	15	16	14	14	34	27	30	22
Bonds	15	17	13	12	--	1	--	1
Taxes	13	11	12	10	3	8	3	6
Cost Recovery	11	17	10	14	44	30	39	29
Transfers	2	--	2	--	5	10	5	7
Interest	2	2	2	1	26	29	24	23
Private funds	--	5	--	3	23	5	10	5

Fees on the generation, transport, treatment, or disposal of hazardous waste, hazardous substances, or solid waste (in Kansas, fees on water use are deposited in the Water Plan Fund, which is used for cleanups) are an important source of revenue for many State cleanup funds. Half of the States rely on such fees to contribute more than 20% of the revenues for their funds. This number has increased slightly each year since 1989, when 19 States relied on fees as a significant source of cleanup funding.

Because hazardous waste fees are such a substantial source of funding for State cleanups, it is important to note that State legislatures often attach limits or conditions on the collection and use of such fees. Fund administrators in South Carolina must report to the legislature on the need for continuing fee collection once the fund balance reaches $7.5 million. Iowa and Kentucky both suspend fee collection if the fund balance exceeds $6 million and resume collection if the fund balance falls below $3 million; West Virginia does the same, but the cut-off fund balance is much lower, at $1.5 million, and the range is narrower, since fee collection resumes when the balance drops to $1 million. Illinois, on the other hand, has a higher cut-off and allows the fund balance to drop further, as it uses figures of $10 million to suspend and $3 million to resume fee collection. The Tennessee legislature imposed even more restrictions on collection of its fees, requiring annual adjustments to maintain a fund balance of $3-5 million in unobligated funds and limiting the amount of fees collected annually to $1 million (estimated); moreover, the fees are abrogated if the legislature fails to appropriate matching funds. Beyond these administrative limits imposed on fees, these revenues may also fluctuate due to changes in waste handling.

In addition to providing funds for cleanup, fees on hazardous waste activities are often intended to provide incentives to generators to reduce their generation of hazardous waste and to encourage recycling efforts. For example, Illinois has regularly raised its fees on the transport and disposal of hazardous waste, which make up 90% of its Fund, at least in part to discourage the generation of hazardous waste. Kentucky bases its fees on the level of treatment required for hazardous waste. A sliding scale is also applied to solid waste disposal in Ohio, where fees provide up to 80% of total cleanup funds. Tennessee also requires the board that sets the hazardous waste fee structure to set the fees at levels (within a statutory range) that encourage recycling and discourage land disposal.

Appropriations are also a primary source of funding for State cleanup funds. They provide more than 20% of the funds for 21 funds in 17 States and are a minor source of funding in an additional 8 States. Many States appropriate money to their cleanup funds on a regular basis, which allows the State agency flexibility in handling cleanups. However, in other States, such as Kansas, appropriations for State-funded cleanups must be requested on a site-specific basis.

Bonds provide significant funding for 17 funds in 12 States. In 1986, the New York legislature authorized the State to sell $1.2 billion in bonds to pay for cleaning up contaminated sites, $100 million of which has since been redirected to cleaning up nonhazardous waste landfills. The State began selling the bonds in 1989 and has $902.7

million in bonding authority remaining. Although New York has by far the most bonding authority, a number of other States have also issued substantial amounts of bonds. New Jersey added $239.5 million in revenues to its Bond Fund in 1993, a significant change from 1991 when the State issued no bonds. Similarly, Michigan added $55.3 million in bond revenues to its Bond Fund. Other States, like New Hampshire, have exhausted their authority to issue bonds and must look for other sources of revenue for the future.

Penalties and fines provide more than 20% of the revenue for the funds in 14 States, but many of the funds for which penalties are a significant source are quite small. Penalties, in fact, rarely provide revenues of the magnitude needed to conduct remedial actions (i.e., on the order of $1 million).

Taxes are a significant source of revenues for 11 funds in 10 States. Several States impose a tax on hazardous wastes or substances that is similar in nature to the fees charged for hazardous waste activities, and in fact, there may be no practical distinction at all. Restrictions similar to the ones imposed on fees are sometimes placed on waste taxes. For example, Florida's tax on pollutants is suspended if the Water Quality Assurance Trust Fund balance exceeds $12 million and is reinstated if the balance falls below $5 million. The primary source of revenue for New Jersey's Spill Compensation Fund is a transfer tax on hazardous substances.

Fund Expenditures

The amount of money spent by States on cleanups in the past year provides another indication of States' financial capabilities to clean up sites contaminated by hazardous substances. State expenditures reflect the State's cleanup capability for the past year and may be a good indicator of future capabilities if the State is maintaining a stable cleanup program. Table V-8 reports States' expenditures and obligations from fiscal year 1993.

Refinements were made to the fund expenditure measure for this 1993 update to better describe States' capabilities to clean up non-NPL contaminated sites, which are the focus of this study. Therefore, States were asked to separate expenditures, i.e., money actually spent during the year, from obligations, i.e., money committed to a specific project or task and thus not available for spending, but not yet spent. They were also asked to categorize their expenditures and obligations by whether they were for NPL or non-NPL sites.

In contrast to 1991, most States were able to separate their expenditures from the amounts they obligated, although some States could not provide any information about their expenditures or obligations (Florida, Maryland and Wyoming). Most States were also able to segregate the amounts they spent or obligated on non-NPL sites from the amounts committed to NPL sites. Unfortunately, the State that reported spending the most money during 1993, New Jersey ($188.5 million), was unable to provide this breakdown, and several other States that spent relatively large amounts in the aggregate were similarly unable to

separate their expenditures by NPL and non-NPL sites (Arizona ($7.3 million), California ($88.6 million), Ohio ($20 million) and Oregon ($18.8 million)). Nevertheless, the 1993 data makes it possible to focus somewhat on the States' capabilities to clean up non-NPL sites. And, to the extent that New Jersey's and California's expenditures are substantially higher than most other States, their exclusion may make the comparisons and analysis more representative of the "typical" State cleanup program.

With those caveats, 37 States reported expenditures of $149 million on non-NPL sites in 1993 (7 States actually spent $0). A slightly different group of 37 States reporting expenditures for NPL sites totalled $166.3 million. Thus, the States appear to be spending amounts on non-NPL cleanups roughly comparable (90%) to the amounts they are spending on their State shares of Federal Superfund cleanups of NPL sites. In fact, only 2 States, Texas and New York, accounted for most of the money reported as spent on NPL sites ($144 million or 87%) and 20 States that each spent $0 on NPL sites are included in the group of 37 reporting their breakdown of expenditures. The inability of some of the States with the highest expenditures to separate those amounts between NPL and non-NPL sites leaves unexplained a large percentage, $396.4 million, or 56% of the total $711.7 million spent by the States in 1993.

As is the case with fund balances, the vast majority of the total spent by States on non-NPL sites is accounted for by a few States. New Jersey spent $188.5 million, followed by Texas, which spent $132 million, New York, which spent $112.9 million, and California, which spent $88.6 million from one of its two funds; together these four States account for $522 million, or 73% of the total spent by the States in 1993. By comparison, in 1991, the $57 million spent by California was the most spent by any State. In 1993, most (27) States spent less than $5 million and 20 States spent less than $1 million. These figures should not be compared with the expenditures figures reported in 1991, because the States were not asked to separate expenditures from amounts obligated, although many of them did, including California, New Jersey, New York, and Pennsylvania.

The combination of fund balances, additions to funds, and expenditures can provide the most accurate indicator of the capability and stability of a State cleanup program. Pennsylvania continues to add more to its fund ($45.6 million) than the total of its expenditures and obligations ($34.4 million) and its balance continues to grow (from $21.8 million in 1991 to $60.5 million in 1993) indicating that the State is expanding its capacity, presumably in anticipation of paying for more expensive remedial actions.

When expenditures exceed additions by a significant amount, the size of the fund balance is critical to maintaining the State's ability to continue the same level of activity. Massachusetts, like Michigan, New Jersey and New York, has had a relatively large amount in authorized bonds ($89 million initially) from which it has funded much of its program over the past several years. But with a remaining authorized amount of $22 million in bonds and expenditures from the fund of $10 million, it is clear that the State will soon need to find other sources of funds if it intends to maintain the same type of program.

Uses of Funds

Table V-9 lists the activities on which States are authorized to spend fund monies. These activities are grouped into nine categories: site investigation (SI), emergency response (ER), removals (RM), studies and design (SD), remedial actions (RA), operation and maintenance (O&M), natural resource restoration (NR), CERCLA matching cost share for NPL sites (CM), program administration (AD), grants to local governments (LG), and victim compensation (VC). The following chart shows the number of States and number of funds that may be used for each type of activity, with the 1991 figures for comparison.

USES OF FUNDS

	No. of States		No. of Funds	
	1993	1991	1993	1991
Emergency response	48	49	59	64
Removals	48	47	60	63
Remedial Actions	45	47	60	61
Studies and design	44	45	56	58
CERCLA match	45	44	50	52
Site Investigation	43	39	58	50
Operation and maintenance	39	42	49	52
Grants to municipalities and local governments	12	11	15	12
Victim compensation	6	13	7	14

Emergency response and removals continue to be the most widely authorized uses, although the number of funds authorized to pay for emergency responses has dropped slightly since 1991. It is not surprising that virtually every State is authorized to pay for these activities since they are among the least expensive and most cost effective in reducing risks at a site. Among the States that have funds, only Connecticut and Colorado reported not being authorized to pay for emergency responses; only Colorado and Wyoming may not pay for removals.

The primary purpose of several funds is not cleanup of sites contaminated by hazardous substances. The Hazardous Waste Perpetual Care Trust Fund in Kansas, for example, is intended primarily for RCRA activities, but up to 20% of the fund may be used for emergency response at hazardous waste disposal sites closed prior to the 1981 enactment of the State's hazardous waste act. Virginia's fund covers incidents related to solid as well as hazardous waste. Other funds are extremely limited in their uses at contaminated sites. Colorado's Hazardous Substances Response Fund is primarily intended for CERCLA match,

with only 5% allowed to be spent on program administration and grants to local governments. Other States also have funds intended primarily for CERCLA match, but they generally have other funds that may be used for a wider variety of activities on non-NPL sites. Colorado's only other fund, however, is the Natural Resource Damage Recovery Fund, which may be used only for restoration of natural resources.

Pennsylvania's Hazardous Sites Cleanup Fund is used for a broad range of activities that go beyond the scope of a typical site cleanup program. The Fund may be used to encourage recycling activities through a grant program for which $2 million has been set aside. A small Loan Fund has been established to facilitate private party cleanups, and the State may also provide loans or grants as inducements and compensation to municipalities where hazardous waste facilities will be located. Oregon has established a more extensive loan program for RPs who need financing in order to undertake cleanup activities. The interest and other terms of the loan are negotiated by the RPs and the Department of Environmental Quality. Similarly, Washington's State Toxics Control Account funds a number of activities in addition to cleanup of contaminated sites, including hazardous and solid waste planning, management, regulation, enforcement, technical assistance, and public education.

Many funds that are authorized to be used for most cleanup activities are limited in practice by very low funding levels. Georgia, North Carolina, North Dakota and South Dakota have such funds but spent no State funds on cleanup activities in 1993, and Alabama, Hawaii, Oklahoma and Virginia all spent less than $100,000. Only Georgia, which is establishing its program, North Carolina and South Dakota had balances exceeding $1 million. The low levels of funds available in many of these States restricts them to small-scale actions, such as emergency removals of drums.

Special Conditions on Fund Use

Restrictions and preconditions on fund use are primarily of two types: those that statutorily require the State to exhaust every funding alternative, whether Federal or private party, before drawing upon State cleanup monies, and those that require the State cleanup agency to obtain specific authorization before undertaking any response action. In Alabama, sites receiving funds must not be on the NPL at the time activity starts; and in several other States, State funds may be used only where Federal funds are not available or sufficient. Eighteen States require that an attempt be made to obtain responsible party participation in site cleanup before State funds are used; many States waive this restriction in the presence of an imminent threat to public health or the environment. Virtually all States pursue RP participation first as a matter of practice and policy. Although it appears that only a relatively small number of States are required to seek alternative funding sources before using State monies, it is probably safe to assume that many more do so as a matter of policy.

Six States require that the State agency responsible for cleanup obtain prior approval from some administrative authority before undertaking one or more types of response or remedial action at hazardous waste sites. All expenditures must be approved by the governor in New Hampshire, the Pollution Control Board in Minnesota, the Environmental Quality Council in Wyoming, the Board of Public Works in Maryland, and the agency's Commissioner in Indiana. Arkansas requires a commission to approve expenditures over $30,000.

In six States, the agency must obtain prior legislative approval for some types of expenditures. Washington requires that any expenditure from its State or Local Toxics Control Account first be appropriated by statute. Oklahoma requires a site-specific appropriation whenever site costs are expected to exceed $1 million; Illinois must get a similar appropriation if site expenditures will exceed $1 million for a single incident. According to Illinois program officials, this cap has not affected the program's effectiveness. In Vermont, non-emergency expenditures over $50,000 must be approved by the legislature or its joint fiscal committee. Similarly, Delaware's joint fiscal committee must approve any expenditures that would exceed 15% of the fund balance. Finally, Nevada's Interim Finance Committee must approve any studies not already budgeted.

California is the only State that restricts fund use based on the origin of contaminants--monies from the State's primary cleanup vehicle, the Hazardous Substance Account, cannot be used for removals or remedial action if a significant portion of hazardous substances originated outside the State.

F. Cleanup Policies

Cleanup policies and criteria are used to establish cleanup goals and to determine the level of environmental and health risk reductions to be achieved by remedial action. As the stringency of cleanup goals increases, the costs of cleanup also increase. A larger proportion of State superfund program funds will be needed to meet strict remediation goals when enforcement efforts fail or there are no RPs.

Determining the appropriate and feasible level of cleanup for hazardous sites involves technical, administrative, and economic considerations that are necessarily evaluated on a site-by-site basis. The States vary considerably in the extensiveness and formality of procedures used to set cleanup standards. Nearly all of the States use Federal guidelines and standards as part of the process of cleanup determination. A number of States have promulgated State standards for a range of hazardous residuals in groundwater, surface water, soil, and air. Those States with the most active cleanup programs have adopted procedures for determining cleanup levels using a wide array of cleanup criteria. These procedures generally involve the application of health-based risk assessment and an evaluation of cost-effectiveness and land use factors on a case-by-case basis.

Table V-10 indicates a number of criteria, including promulgated cleanup standards, water quality criteria, MCLs or MCLGs, background levels, risk assessment, and EPA

guidelines, that are used by States to determine cleanup levels at hazardous sites. All but two States (District of Columbia and Idaho) reported the use of two or more criteria. Since 1991, more States have begun to use a variety of cleanup criteria.

CRITERIA USED TO DETERMINE CLEANUP LEVELS

Criteria	Number of States
MCLs or MCLGs	47
Water Quality Criteria	43
Risk Assessment	42
Background Levels	40
EPA Guidelines	34
Promulgated Cleanup Standards	19

Thirty-four States report the use of EPA guidelines for cleanup standard selection. Forty-seven States apply MCLs or MCLGs when relevant. Forty-three States apply water quality criteria. Forty States report the use of background levels to determine cleanup levels. Nineteen States report having promulgated standards used to determine cleanup levels. Two of these States (Arizona and Colorado) have adopted RCRA standards by reference for cleanup purposes in addition to promulgating other standards. The other States have developed standards for various chemical residuals in soil, surface water, groundwater and/or air. Most of these standards are derived from health-based risk assessments with carcinogenic risk levels of 10^{-4} to 10^{-6} or a Hazard Index ≤ 1. All of the States with promulgated standards also use other available criteria and EPA guidelines. Forty-two States use risk assessments to determine cleanup levels. The majority of these States use U.S. EPA Risk Assessment Guidance to derive these levels on a case-by-case basis. The rest of the States have developed their own risk assessment procedures.

Several States cited general statutory instructions that parallel CERCLA's original guidance on cleanup standards, calling for cost-effective measures that protect public health and welfare and the environment. Massachusetts' standards call for permanent solutions whenever feasible, and include consideration of both technical and economic feasibility. Texas looks for the lowest cost alternative that is technically feasible and reliable and effectively mitigates and minimizes damage to and provides adequate protection of public health and safety or the environment.

Promulgated Cleanup Standards

Nineteen States report the use of State-promulgated standards for determining cleanup levels. These standards include both standards adopted by the State for chemical residuals in soils, groundwater, surface water, and/or air and Federal RCRA or CERCLA standards that have been adopted by reference into the State code. Washington has

adopted standards for air, soil, groundwater, and surface water based on health-based formulas.

All of the States apply these standards in conjunction with risk standards or other criteria. Michigan uses a three-tiered set of cleanup standards: background quality is applied at Type A sites, risk-based standards at Type B sites, and less stringent standards at Type C sites.

Federal Standards and Guidelines

MCLs and MCLGs are the most widely used standard for cleanup as reported by 47 States. In many cases, MCLs are used as the first point of reference in setting groundwater cleanup levels. Thirty-four States reported the use of EPA guidelines either as the primary source of cleanup standards or in conjunction with other standards. Standards found in RCRA and CERCLA were cited as relevant by more than half the States. Several States reported following NCP procedures.

Water Quality Criteria

Forty-three States, one more than reported in 1991, use existing State surface water quality criteria, adopted under the Clean Water Act, in determining cleanup standards. Those States that do not use water quality criteria rely on other promulgated State standards, MCLs, and health-based risk assessment.

Background Quality

Forty States, an increase of 16 States since 1991, reference ambient or background water quality in determining cleanup standards. While some States have background quality as their cleanup goal, they recognize that it may not be feasible for all cleanups to meet this standard; in practice, they may use ambient quality as a starting point for assessing cleanup levels and negotiating with responsible parties. In Oregon, for example, if cleanup to background is infeasible, the State will select a remedy that attains the lowest concentration level that satisfies specified feasibility criteria, which include cost-effectiveness. In other States, ambient quality is simply one factor that must be considered before a cleanup standard is determined. Finally, some States require cleanup to background for some, but not all, sites based upon regulatory criteria such as groundwater classification.

Risk Standards and Assessments

Forty-two States, four more than in 1991, either reference risk levels or conduct a risk assessment in determining cleanup standards. All of these States use risk assessment in conjunction with other criteria. Some States invoke risk standards only in the absence of applicable standards. In Indiana, for example, cancer risk assessment is used where MCLs and applicable or relevant and appropriate requirements (ARARs) are not established, or

where multiple carcinogens are present. Other States have risk standards that apply generally. In addition to risk standards for carcinogens, North Carolina prohibits any chemical intake exceeding the amount known to cause non-carcinogenic health effects. Kentucky requires that there be no long term detrimental effect for non-carcinogens. North Dakota uses narrative rather than numerical risk levels.

Site-by-site risk assessments are performed by at least 12 States to determine cleanup levels. Risk assessments may be used either in the absence of other standards, or as supplements to other standards. For example, Massachusetts undertakes risk assessments only when an appropriate standard does not exist for a specific chemical constituent. In contrast, Florida and Kentucky weigh the results of site-specific risk assessments along with other applicable standards to determine cleanup levels at each site.

G. Public Participation

General

The degree of public participation required in decisions about cleanups of hazardous waste sites varies widely from State to State. Public participation may be required by statute or regulation, pursued as agency policy, or implemented in response to expressed public concern. Table V-11 describes formal and *ad hoc* public participation requirements for each State.

There has been a slight increase in the States' public participation requirements since 1991. The number of States reporting some sort of public participation procedure increased from 43 in 1991 to 45. A total of 24 States have statutory or regulatory requirements for public participation, up from 22 in 1991. Another 21 states solicit public participation strictly as a matter of policy or on an *ad hoc* basis.

Some States have no specific public participation requirements of their own, but follow the public participation guidelines contained in the National Contingency Plan (NCP) as a matter of policy. The NCP guidelines are the primary source of public participation practices in eight States: Illinois, Indiana, Kansas, New Jersey, South Carolina, Tennessee, Utah, and Virginia. Illinois policy supplements the NCP guidelines by stipulating that the required public meeting must be a formal public hearing.

A number of States are developing new public participation procedures at this time. New Jersey, which currently solicits public participation according to policy, is preparing amendments to its technical rules which will address public participation. The Ohio statute addressing public participation is under review. Nevada has a draft public participation policy which addresses public notice, public hearings, advisory groups, and appeal procedures. Hawaii is preparing to establish public participation requirements in its administrative rules; these will include requirements for an administrative record, public notice, solicitation of public comments, and the development of a public education program for hazardous waste issues.

States that have voluntary remediation programs often have public participation requirements which apply specifically to those programs. In a few cases, these requirements exceed the public participation requirements of the State's regular cleanup program. For example, while Indiana's regular cleanup program has no specific public participation requirements other than adherence to NCP guidelines, the Indiana voluntary remediation program requires the State to provide public notice of all actions and to conduct a hearing before approving any workplan.

Public Notice Requirements

One of the most common public participation practices is the notification of the public at important points during the site handling process. A total of 35 States report that they provide public notice at some point during site handling. Fifteen States have statutory or regulatory provisions for public notice. Twenty States provide public notice according to policy; this figure includes those States that provide notice as part of their adherence to NCP guidelines.

Public notice is usually issued as part of the site listing procedure or when a remedial action plan is proposed, but some States require notice of other events as well. Delaware requires notice of proposed consent decrees and settlement revisions. Montana requires notice of consent decrees and administrative orders.

The States have a variety of methods for performing public notice. New York uses mass mailings for this purpose. Some States, including Alabama and Missouri, place announcements in local newspapers. Nebraska requires that proposed remedial action plans be placed in local libraries.

In addition to providing public notice, many States make information available to the public in more passive ways. Several States, including Kentucky, New York, and Ohio, maintain information repositories like those required by the NCP. Massachusetts permits site inspections by the public. Vermont requires that hazardous waste and UST sites be explicitly identified in land records which are maintained by local governments and made available to the public. Wisconsin makes its files available to the public with limited confidentiality.

Public Comments

A total of 23 States solicit comments from the public during the site handling process. Thirteen States have statutory provisions for public comments. Ten States solicit public comments according to policy; this figure includes those States that provide an opportunity for public comment as part of their adherence to NCP guidelines. Eight States indicate that they have statutory provisions for comment periods with fixed durations of between 30 and 90 days; these include Alabama, Arizona, Nebraska, New York, North Carolina, Oregon, Pennsylvania, and Wisconsin.

Public Meetings/Hearings

A total of 35 States have provisions for public meetings or hearings during the site handling process. Eighteen States have statutory requirements for meetings or hearings. Seventeen States have discretion to hold meetings as a matter of policy; this figure includes those States that may hold meetings as part of their adherence to NCP guidelines.

Some States, like California, Ohio and Pennsylvania, are required to hold meetings or hearings during the site handling process. In other States, including Arizona and North Carolina, meetings are discretionary. Oregon and Wisconsin hold meetings upon citizen petition. Montana holds meetings at the request of local government officials.

Some States conduct less formal outreach by meeting with citizens on an individual basis. State officials in Alaska and Florida sometimes perform door-to-door outreach. Minnesota officials meet with citizens in their homes.

Public Participation Plans

In some States, a public participation plan similar to that outlined in the NCP may be adopted by States to lend a more formal structure to public participation activities. Under such a program, one or more spokespersons may be designated to inform, solicit views of, and respond to, inquiries from local residents, local government officials or other agencies regarding conditions and activities at hazardous waste cleanup sites.

Several States report the use of public participation plans. Massachusetts prepares a public participation plan upon the petition of at least 10 citizens. Louisiana institutes community relations programs at complex cleanup sites. New York and Washington develop and implement site-specific public participation plans.

A number of States indicate that they assign public relations personnel to their cleanup sites. Minnesota assigns each site a public information officer. In Illinois, community relations coordinators are assigned to qualifying sites.

Some States, including Iowa, provide technical assistance to local governments and citizens for the purpose of participating in the cleanup process at a particular site. Massachusetts provides technical assistance grants, like the Federal Technical Assistance Grants under CERCLA.

Advisory Groups

Many States' cleanup programs are assisted by groups of citizens and private sector representatives acting in an advisory capacity. These groups provide input on site handling decisions and changes to cleanup programs.

New Jersey's Site Remediation Program Advisory Group consists of representatives of industrial, banking, real estate, consulting, and environmental groups, and assists the State with program refinements and operations. New York's State Superfund Management Board includes environmental group and citizen representatives.

In promulgating regulations for its cleanup law, Oregon used input from a 22-member committee composed of citizens, local government officials, and environmental and industry representatives. Washington makes use of regional citizen advisory committees established by the State Department of Ecology. Colorado is currently using citizen advisory groups with greater frequency. Nevada's draft public participation policy provides for citizen advisory groups. The Alaska legislature has established a Citizens' Oversight Council on Oil and Hazardous Substances.

H. Enforcement

State cleanup fund laws frequently contain enforcement provisions. Enforcement authorities and capacities under State laws vary significantly. Many of the States with cleanup fund laws have enforcement provisions contained in those laws. Others rely for enforcement on their general environmental laws, hazardous and solid waste laws, groundwater laws, and other provisions. (See Table V-2). Some States have no enforcement provisions directly linked to State remediation programs for contaminated sites because they have no fund-lead program independent of CERCLA authorities (e.g., Nebraska, Colorado), or because their cleanup fund was enacted without supporting enforcement provisions (e.g., West Virginia).

Nebraska's enforcement provisions are contained in its groundwater protection laws and apply only to contamination of groundwater. Colorado uses its hazardous waste laws and the citizen suit and natural resource damage provisions of CERCLA.

Liability

A key issue in enforcement is who is liable. Most of the States have followed the Federal lead and make a wide spectrum of actors "responsible parties" at cleanup sites. However, some States have more difficulty reaching beyond owners, operators, and direct disposers. States that rely on RCRA-type authorities generally must show a RCRA violation or, at least, RCRA jurisdiction over the actor or the site at the time that the disposal occurred. Some State solid waste laws or imminent danger provisions provide a longer reach. Most States define "waters of the State" to include groundwater. Because most States also have a general provision prohibiting pollution of "waters of the State," they can arguably reach generators or transporters that have placed hazardous material where it has entered the groundwater.

Standards of liability are even more complex. The threshold question is whether any showing of culpability is required. In other words, is liability strict -- that is, based solely

on the occurrence of a release -- or does it require proof of fault? The second question is how liability is to be divided among the various actors who contributed to the presence and release of a hazardous substance. This is the issue of allocation -- joint and several versus proportional liability. These two questions are often misunderstood. They must be answered separately. For example, strict liability may be joint and several in one state, and proportional in another.

With strict liability, a responsible party who has contributed to hazardous conditions at a site is liable for the actual or potential damages based upon simply the occurrence of a release, without proof of fault. Liability standards other than strict require a greater burden of proof to be satisfied by the State, such as proof of negligence or intent by a responsible party. This, in turn, requires the State to spend more staff time and money investigating the intent of RPs rather than on reducing risk. Standards that require proof of fault effectively limit the universe of parties to whom cleanup liability may attach. This, in turn, is likely to reduce the effectiveness of the cleanup program. Forty States have strict liability standards (Table V-12). One of these States is Wisconsin, which has two cleanup statutes -- one with strict liability and one without. Of the remaining 12 States, 7 do not specify liability standards, 4 specify that they are <u>not</u> strict (Alabama, Tennessee, New Mexico, and Wyoming), and 1 is limited to sites where waste is "improperly managed" (Virginia). Of the seven States without a specified standard, several assert strict liability (e.g., Ohio).

The breakdown on allocation of liability among responsible parties is more complex. Thirty-two states have strict, joint and several liability (Table V-12). Of these 32, 6 allow parties to prove that they are entitled to apportionment (Arkansas, Louisiana, Maryland, Montana, Texas, and Vermont). Additionally, two States (New Mexico and Wyoming) follow joint and several liability, but not strict liability.

Of the 18 States that do not specify joint and several liability, only 4 specify proportional liability (Alabama, California, Tennessee, and Utah). No standards for allocating liability are specified in 14 States. These include seven States without any specified liability standard (this again includes Ohio, which asserts joint and several liability), six States with strict liability standards, and Virginia with its non-strict liability standard. Any of these 14 States may be able to avail themselves of joint and several liability as a common law doctrine.

Prior updates to this study have reflected the shifting nature of assertions of liability standards where the State statutory language is unclear or subject to more than one interpretation. This study relies, to the extent possible, upon information about liability standards provided by the States themselves, with an independent cross-check against the language of the statutes to assure that the States' asserted standards were consistent with the language of the statutes. Thus, for example, New York is shown in this update as having a standard of "strict, joint and several" rather than "other" as in previous updates. In part, this is based on some stronger interpretations in 1992 New York regulations. Conversely,

Ohio's standard, which was previously shown as "strict, joint and several" (but with an explanation) is now shown as "not specified." Neither statute has changed since the 1991 update.

In most cases, liability is subject to interpretation by State courts, based on the statutory language, statutory structure, and the legal arguments advanced by the State agency or State Attorney General. In a significant number of States, the liability standard has never been tested in court or fully determined because all cases have been settled prior to court resolution.

Enforcement Tools

Virtually all State programs have authority to issue administrative cleanup orders. Where such authority is not available under a State cleanup statute, it often is available under a solid and hazardous waste law, a groundwater protection law, or a general imminent endangerment provision. All States have authority to seek injunctions for cleanups. Both order authorities and injunction authorities are limited by the substantive provisions of State law; some do not reach generators, some require proof that the release is of a "hazardous waste," and some are as broad as the Federal Superfund program or broader.

State cleanup orders are not always identical to CERCLA §106 orders, which are not subject to pre-enforcement review. In many of the States, a responsible party receiving an administrative cleanup order has the right to seek review of that order before a board, commission, or State court. For example, in Illinois, the State must file a complaint with the Pollution Control Board if the responsible party does not agree to cleanup. In Arizona, the recipient of an order may seek administrative review. Pennsylvania's Hazardous Sites Cleanup Act provides for two kinds of orders that may be issued by the Department of Environmental Resources; one is not subject to pre-enforcement review, and the other may be appealed to the State's environmental hearing board. In Texas, the recipient of a cleanup order may appeal to State court. Other States, like Tennessee and Oregon, do not allow pre-enforcement review. In a significant number of States, the availability of pre-enforcement review has not been determined because, until now, all sites have been handled by consent order or voluntary agreement.

The standard of review for an agency's administrative order may be important. Frequently there is a deferential standard of review. In Pennsylvania (under one of the two order types) the agency action must be upheld unless it is "arbitrary and capricious." In Texas, the State must prove on appeal that there is an imminent and substantial danger and that the order recipient is liable; however, if the "appropriateness" of the remedy is contested on appeal, the remedy must be upheld unless the court finds it "arbitrary and capricious." In most States, however, no standard of review is spelled out in the statute.

Recovery of punitive damages (Table V-13) is provided in 25 States. Recovery of treble damages is authorized in 22 States; 1 State authorizes double damages; and 2 States

authorize 1.5 damages. Since the 1991 update, Georgia has enacted a treble damages provision and Texas increased its double damages to treble damages. The States' standards for assessment of punitive damages vary somewhat, but generally require more than simple refusal to do the work directed in an order. For example, the Pennsylvania statute requires "willful" failure to comply. The New Jersey courts have created a "good faith" defense to such damages.

Most States have civil penalty provisions usable in enforcing cleanup of hazardous sites, but most rely on hazardous waste laws, water pollution laws, and solid waste laws for this purpose. Penalties have not been deemed important by the States in securing cleanup actions. The potential to perform fund-lead cleanups and recover punitive damages has been a much stronger incentive. The real force of this incentive depends upon the credibility of the State's threat to spend fund monies. The enforcement leverage is minimal to non-existent in those States where the fund may only be expended for the State share of NPL cleanups or for emergency responses, or where it may be expended on State sites only after a lengthy listing process or by special enactment of the legislature. In contrast, in those States where expenditures can be authorized relatively quickly, the States' enforcement leverage is enhanced.

Criminal penalties are not really a factor in most State cleanup programs. Virtually all of the State programs contain provisions making the submission of false information or failure to pay fees (where State funds are supported by fees) criminal offenses. In general, the failure to comply with a State cleanup order is not a criminal offense; however, solid and hazardous waste statutes provide a broad range of criminal offenses that may reach unlawful disposal and other types of conduct.

Natural Resource Damages Programs

There is great variation in the content and scope of the States' natural resource damages (NRD) programs. The States' programs range from having the legal authority to recover NRDs, to using State funds for natural resource restoration, to having full-time staff devoted to overseeing NRD Agreements. Several States -- such as Arizona, Hawaii, Maryland, and Tennessee -- report that they have natural resource damages programs, but have not actually pursued any NRD claims or undertaken any recovery actions. Several other States -- such as Iowa, Minnesota, Missouri, Pennsylvania, and Virginia -- report that they do not have formal NRD programs, but that they do have the authority to recover damages to natural resources from PRPs.

Some States -- such as Connecticut, Florida, Kentucky, Minnesota, Pennsylvania, Vermont, Virginia, and Wisconsin -- do not have official NRD programs, but are able to use monies from their State funds for natural resource damage assessments or restoration. Colorado has a Natural Resource Damage Recovery Fund, which is to be used solely for restoring damaged natural resources. Alaska and Missouri do not have NRD programs, but they have both collected natural resource damages through cleanup settlements.

Information about the NRD programs of the 50 States, Puerto Rico, and the District of Columbia appears in Table V-14.

Only two States report that they have full-time staff devoted to natural resource damages. California has 25 FTE staff managing the Department of Fish and Game's natural resource damages program, and Washington has one full-time staff member assigned to the Department of Ecology's State/CERCLA NRD process.

Twenty-five States report that they have natural resource damages programs. Fourteen of these states report recovering NRD claims with a combined total in excess of $126,944,372. This does not represent a full accounting of the total, since California could not provide a total amount of money recovered, but reported that three major NRD recoveries by the California Department of Fish and Game totaled $23,855,533. In addition, Kansas was not able to provide any information about the damages they have recovered. The amount of damages recovered varies greatly from State to State, ranging from $200,000 in Ohio (since 1990) to $40,000,000 in Washington, where the State has joined with Federal Indian trustees in joint NRD settlements.

There are currently 70 natural resource damages claims pending in 15 States. Fourteen of these States have NRD programs. Utah does not have a formal NRD program, but has one natural resource damages claim pending for $12,000,000. Six States were able to report the approximate amount of pending claims; this totalled over $514,500,000. Three States report that they are currently developing natural resource damages programs.

Property Transfer Provisions

In the 1991 update to this study, State property transfer provisions were the special topic discussed in Chapter IV. This year, they are included in Chapter III and Chapter V, Table V-15. Property transfer provisions are "laws, regulations, or policies that link the discovery, identification, investigation, cleanup, or disclosure of hazardous substance contamination to transfers of real property, or to transfers of ownership or control of such property." An increasing number of States have adopted property transfer provisions; 23 States report that they have property transfer provisions, up from 18 in 1991. Twenty-six States have no laws concerning property transfer. Three others -- Arkansas, Massachusetts, and New Hampshire -- have only superliens.

Most property transfer provisions impose duties to disclose the presence of hazardous substances on a site; others require site investigation; and some even require cleanup as a condition of the transfer. "Superliens" are also included in this study. While not technically a property transfer requirement, such liens often come into play at the time of transfer, because they make property transfers more difficult, or require satisfaction in order to give the transferee clear title to the property. A great many States that have cleanup funds have authority to impose liens on the cleaned-up property in order to recoup the State's costs, but these ordinary liens have not been included in this study.

Superliens differ from ordinary liens in that they claim a higher priority than they would ordinarily obtain under the laws governing security interests. Ordinarily, liens obtain priority in the order in which they are recorded. The first lien recorded takes precedence over the second lien, the second over the third, and so on. This precedence means that upon sale of the property (or foreclosure), the earlier lienholders must be paid before the later ones can recover anything. A superlien changes this priority by giving the State's lien for recovery of cleanup costs priority over some or all liens even if they have been recorded earlier.

The rationale for the superlien is that if the State had not expended the money, the property would have been worthless; therefore, the State should recoup its expenses before any others benefit. Seven States -- Arkansas, Connecticut, Louisiana, Maine, Massachusetts, New Hampshire, and New Jersey have superliens. However, the superiority of these liens varies somewhat. For example, New Jersey's superlien takes priority over all other liens and over other real property owned by the site owner, not just the cleaned up property. Most other superliens give priority only over liens on the cleaned up property. Maine's superlien takes priority over any lien recorded after the date of the superlien law, but not those recorded before the law. Louisiana's lien does not take priority over prior recorded liens, but its Inactive and Abandoned Hazardous Waste Sites statute allows the recordation of the lien before the amount is known and allows the lien to relate back to the date of filing, thus giving it some effective priority.

Sixteen States have provisions that require deed recordations where hazardous sites have been either discovered, listed, or cleaned up. Deed recordation requirements in some States are limited to hazardous or solid waste disposal facilities. Louisiana requires recordation of notices that a site has been used for disposal of hazardous waste or as a solid waste landfill, and that such wastes remain; or, where the State finds an abandoned site, that the site is an abandoned waste site. In Michigan, a seller who knows that hazardous substances were released in a reportable quantity must not only provide notice to the purchaser, but also record the notice with the deed of transfer. Upon completion of cleanup, the owner records a certificate of completion of an approved remedial action. Similar provisions apply in West Virginia, but only to conveyors of hazardous waste treatment, storage, or disposal sites. New York requires county clerks to index in the land records any sites listed on the Registry of Inactive Hazardous Waste Sites. In Iowa, a conveyor of real property is required to provide the recorder of deeds with a statement regarding the existence of wells, disposal sites, underground storage tanks, and hazardous wastes; the recorder must notify the transferee and the State if these are present.

Sixteen States require disclosure by sellers to purchasers. Some of these States explicitly require sellers to examine their property; in others, the obligation is implied or unstated. In some cases the disclosure is limited to sites that have come to the attention of the State cleanup program. In others it applies to whole classes of industrial properties. In California, any owner of a nonresidential real property interest who knows, or has reason to believes that a hazardous substance is located on or beneath the property is required to

notify, in writing, each buyer prior to the sale. Lessees of residential and nonresidential property are required to give notice to property owners of any release of a hazardous substance. Failure to give notice can subject the lessees to liability for damages and civil penalties. Sellers of real property or residential stock cooperatives with one to four dwelling units must disclose whether they are aware of the presence of any substances, materials, or products which may be an environmental hazard. California counties and cities may add their own disclosure requirements.

The Illinois Responsible Property Transfer Act requires that the transferor provide to both the transferee and lender environmental disclosure documents. The law applies to all transfers of real property which is used for manufacture, import, or use of hazardous materials above a statutory threshold or which contains an underground storage tank. Parties to the transaction may cancel a prospective transfer based on the disclosures. Indiana's Responsible Property Transfer Law is modeled on the Illinois statute.

In Minnesota, there is both a recordation requirement (limited to hazardous waste facilities or extensive contamination by release of a hazardous substance) and a State-assisted program to assist transferrees in determining whether a property has had a release. Missouri law requires disclosure, but only for sites on the State's registry.

Two States require cleanup or cleanup commitments in connection with transfers or sales of industrial establishments. New Jersey's 1983 Environmental Cleanup Responsibility Act (ECRA) pioneered the whole wave of disclosure laws that followed. It remains the most extensive in terms of obligations, however. In 1993, the legislature amended ECRA, renaming it the Industrial Sites Recovery Act (ISRA). ISRA retains the basic approach of ECRA, requiring parties to examine sites and imposing cleanup obligations as a condition of the transfer. The law also applies to closures of facilities. Failure to comply makes the transaction voidable by the transferee or by the State; civil penalties are also available. ISRA does allow deferral of cleanup under three conditions: if the site has been assessed, if it will remain in the same industrial use after the transfer, and if the seller's ability to pay for cleanup is certified. The New Jersey law is particularly far-reaching because it is not limited to conveyances of real property; ECRA, and now ISRA, also apply to transfers of ownership and control of entities holding real property.

Connecticut has a cleanup law patterned after ECRA, but it is not quite as comprehensive. It too requires cleanup as a condition of transfer. However, the transaction is not voidable for noncompliance. Instead, the transferor remains strictly liable and is also subject to penalties.

Fifteen States report that they maintain a data base or data bases to assist purchasers and other parties to transactions in conducting environmental due diligence to determine whether sites have been contaminated.

CHAPTER IV
VOLUNTARY REMEDIATION PROGRAMS

There has been significant interest on the part of the States and private parties in finding an alternative to the conventional CERCLA or State superfund approach to cleaning up hazardous waste sites. The primary motives of the States are to expedite the cleanup of non-NPL sites and to achieve results that are acceptable to the State in terms of costs and protection of the environment and human health. Private parties are interested in avoiding the lengthy, costly and inflexible Superfund procedures in the event that their property is listed on the NPL. Many States have established, or are in the process of developing, programs which allow private parties to initiate and proceed with cleanup with varying levels of State oversight.

These programs are referred to by a variety of names, including voluntary cleanup or remediation or independent action programs. It is difficult to select a general term to encompass all of the State programs because of the variation in State oversight and enforcement conditions. However, the term "voluntary remediation" has been selected here because of its common usage. The term "voluntary" is not quite apt because of the State oversight and/or approval of cleanup activities at these non-NPL sites. In fact, three States' programs (North Carolina, Utah, and Washington) require the "voluntary" party to enter into an enforceable consent agreement. Therefore, the term "voluntary" should be equated with "private-party initiated" which is the single aspect that all of these programs have in common. The term "remediation" should be understood to be guided or interpreted by the State through active workplan oversight, designation of cleanup levels, and/or cleanup sign-off procedures.

Currently, 14 States (Delaware, Illinois, Indiana, Maine, Massachusetts, Minnesota, Missouri, New Jersey, North Carolina, Oregon, Utah, Virginia, Washington, and Wisconsin) have established voluntary remediation programs. Six States (Alaska, California, Kansas, Ohio, Pennsylvania, and Tennessee) are developing programs or have legislation pending. Numerous States are participating in private party cleanups on a site-by-site basis without a written program or guidelines.

Details of the 14 State programs are listed in Tables V-17 through V-21. The data in these tables were drawn directly from Voluntary Remediation Profiles, a study completed by Stateside Associates in August 1993 for General Electric. This report provides a thorough analysis of established and proposed State programs. The key criterion for inclusion in this inventory was that the program be documented with established authority, investigative and remedial procedures, cleanup levels, State sign-off conditions and procedures, and liability provisions. While most States have the authority to allow private parties to clean up in accordance with State agreements, it is the existence of a documented program which encourages private parties to clean up sites by this alternative administrative method. These sites would otherwise not be cleaned up because of their relatively low priority, or their cleanup would be delayed by Superfund procedures. The following discussion of voluntary remediation programs is based on the Stateside Associates' study,

recent State program developments provided by Mark Anderson, the study's author, and the limited questions in ELI's State cleanup program survey.

There are four basic approaches among existing State programs to oversight and enforcement of private party remediation activities at non-NPL sites. These are:

1) the State provides oversight during the development of the investigative and remedial action plans and signs off at completion of cleanup with a No Further Action Letter;

2) a third party, licensed by the State, provides oversight of the cleanup process and the State does not sign-off on completion of the remediation;

3) the State does not provide or require oversight, but provides review and sign-off when the remediation has been completed; and

4) the State and the private party sign an enforceable consent agreement which specifies the remediation work procedure and schedule, cleanup standards to be met, and an oversight and cleanup payment schedule.

Nine States (Delaware, Illinois, Indiana, Maine, Minnesota, Missouri, New Jersey, Oregon, and Virginia) have adopted the first approach. Three States (North Carolina, Washington, and Wisconsin) have adopted the second approach, one State (Massachusetts) follows the third approach, and three States (North Carolina, Utah, and Washington) have adopted the fourth approach. The States of Washington and North Carolina each have two different voluntary remediation programs; one in which the State does not provide oversight but certifies completion of cleanup and another which requires an enforceable consent agreement. Private parties have the choice of entering a consent agreement with the State, if they desire active State oversight of the cleanup, or selecting a third party to oversee the cleanup, which must be certified by the State at completion.

Tables V-17 through V-21 provide an inventory of the legal and procedural components of the States' voluntary remediation programs and a means of direct comparison between the various programs. The following discussion provides a summary of this information.

Authority

Seven States (Indiana, Maine, Massachusetts, Minnesota, Missouri, New Jersey, and North Carolina) have specific statutory authority for their voluntary remediation programs, with procedures outlined in the statute. Seven States (Delaware, Illinois, Oregon, Utah, Virginia, Washington, Wisconsin) have established programs under the general authority of the State's Toxics Control Act, Hazardous Substance Cleanup Act, Waste Management Act, Environmental Protection Act or similar statute. The specifics of the programs are issued as agency procedural rules and regulations. There is no correlation between the general or specific nature of the statutory authority and the basic administrative approach taken by the program.

Agency

Among the 14 States with programs, 9 have a specific voluntary remediation division or program office. In the remaining cases, the State's environmental department has responsibility for private party cleanups.

Initial Agreement

In all of the existing programs, cleanup activity is initiated when a private party contacts the State to: 1) notify them of the contamination and to request State oversight, 2) apply to enter the program, or 3) offer to enter into a consent agreement with the State.

The State's initial response varies depending on the basic administrative approach the State has adopted. In the Maine and Minnesota programs, the State does not provide oversight until the private party application is filed and the site is accepted into the program. In North Carolina's consent agreement program, after the party notifies the State of its intent, the Department and the party sign a consent agreement. The agreement must be signed before the State will review documents or participate in the preparation of the Remedial Action Plan. In New Jersey, a party submits a formal application. If the site is accepted into the program, a memorandum of agreement, which outlines the process to be used to obtain State sign-off, must be signed. Massachusetts has a unique site/risk classification procedures used to determine the appropriate initial agreement. When a party notifies the State that a site is contaminated, the party has one year to classify the site according to the risk posed. The site is labeled as either a Tier I Category A, B, or C site or a Tier II site. The State has a numerical ranking system to be used to determine the risk level. If the site poses a "serious" risk to public health and the environment, it is labeled a Tier I Category A site and there is direct State oversight and enforcement of the cleanup. Sites placed in any other category follow voluntary program procedures.

Workplans and State Approval

Cleanup of workplan requirements, in terms of content and procedure, vary directly with the extent of State oversight exercised in the program. In the majority of programs in which the State has an active oversight role, investigation and remediation work plans are required to be submitted for State approval. Generally, the State will also be involved in the determination of cleanup standards or approval of risk assessment procedures during workplan preparation. New Jersey plays a more active role in its program than most States. The process used in their program is virtually identical to that of an enforced remediation action. The party must first submit an investigation work plan for Department approval. Next, the party must submit and complete a feasibility study as part of the remediation work plan. Finally, the Department approves the study and chooses a remedy for site cleanup. New Jersey is the only State, except for Washington in their consent agreement program, that selects the cleanup remedy. The other States approve workplan elements and sign-off on the cleanup after completion.

Massachusetts' program is the only one which applies different workplan requirements and levels of State oversight based on site priority, as described in the

preceding section. If the site is a Tier I Category B or C site, the party may use a licensed consultant but a permit must be obtained. If the site has been labeled a Tier II site, a party can use a licensed consultant with no permit.

North Carolina is one of two States that have two active programs with different levels of State oversight and workplan requirements. In one program, there is no State oversight and workplans are not required. After the cleanup is completed, the party submits a report to provide a basis for the State's determination that the site has been cleaned to Department standards. In the State's "consent agreement" program, the party must prepare an Investigation Work Plan in accordance with U.S. EPA Engineering Support Branch Standards Operating Procedures Manual (SOP). The plan consists of two phases: location of all potential sources of contamination, and determination of the extent of contamination. The Department notifies the party when it determines the investigation is complete. The Department sets cleanup goals after the first phase of the investigation is complete. The party must then prepare a detailed remedial action plan which is approved or disapproved after a public comment period.

Oversight Costs and Schedule

Most of the programs with active State oversight require the party to pay an hourly oversight charge to the Department in addition to all cleanup costs. Indiana requires a $1,000 application fee which is applied against oversight costs. Delaware negotiates deposit requirements in the consent agreement. Oregon requires an initial deposit of $5,000 which is applied to State costs. New Jersey does not require a deposit against oversight charges. North Carolina is an exception in that it does not charge for active State oversight.

Most of the States have no time limits on remediation actions. New Jersey sets no time limits, but if insufficient progress is made toward completion, the site will be eliminated from the program. In the three (North Carolina, Utah and Washington) consent agreement programs, time schedules are stipulated. Most of the State programs without consent agreements allow a party to terminate remediation actions at any point.

Cleanup Standards

In most of the programs, a number of criteria, including State and Federal standards and guidelines, background quality, and risk assessment, are applied to determine cleanup levels. Procedures for determining cleanup levels are generally well-defined. In Minnesota, and several other States, cleanup levels are the same as those required under State statute for Federal Superfund enforcement actions.

Indiana has developed guidance specifically for cleanup under the voluntary remediation program. The guidance provides three options for determining cleanup levels: 1) background levels, 2) levels determined by specific equations based on factors such as the type of contamination and land use (residential or industrial, and 3) a site-specific risk assessment according to U.S. EPA Superfund Risk Assessment Guidance (Volume 1 Human Health Evaluation Manual, Part A).

Delaware requires a site-specific risk assessment in accordance with Departmental guidance under Delaware Regulations Governing Hazardous Substance Cleanup. The Department uses U.S. EPA Superfund Risk Assessment Guidance and takes exposure pathways and land use into account in risk characterization.

Minnesota applies groundwater cleanup levels based on established state drinking water criteria known as Recommended Allowable Limits (RALs) and federal MCLs. Applicable State surface water quality criteria are also determined on a site-specific basis using a Soil Cleanup Guidance Document. Site information is used in a set of equations or model to determine standards for the relevant exposure pathways. Where the soil cleanup model is not applicable, cleanup levels are determined using; 1) best available technology, 2) background levels, and 3) other applicable criteria such as RCRA or TSCA requirements.

Public Participation

Eight of the 16 State programs have public notice requirements at various stages of the cleanup process. Delaware requires notice and a 20-day comment period before the Department approves a remedy. Washington's program requires the Department to provide public notice on all agreements. In Oregon, a four-week public notice and comment period is required before work plan approval. In Virginia, the Department requires public notice before State sign-off on site remediation.

Sign-off Procedures

There are several different types of procedures used by the States to certify State approval of a completed voluntary cleanup. Sign-off procedures vary in terms of, 1) the information required of the remediating party to make a showing of cleanup completion and 2) the certification of completion and/or statement of no further enforcement action.

Final cleanup information requirements may consist of; a final report with monitoring data which verifies that the approved remedial action plan was completed, submission of all site data and document for State review, a demonstration that no contamination is present at the site in concentrations above established cleanup criteria or risk-based cleanup standards, or a determination by a licensed consultant that the site is clean and a completion statement is filed with the State.

The majority of the States issue Certificates of Completion or No Further Action letters upon a showing that the cleanup has been completed in accordance with State requirements. The No Further Action letter assures the remediating party that the State will not take further enforcement action. However, in some programs the State explicitly reserves the right to require environmental assessments or remedial actions in the event that any future monitoring identifies contamination. Certificates of Completion generally also reserve this right.

The following three State programs provide examples of the basic differences in State sign-off procedures. North Carolina's enforced program requires the submission of a final

report with sampling data verifying completion of the State approved Remedial Action Plan. After review and approval of the report, the site will be assigned No Further Action status in the Inactive Hazardous Sites Inventory. The remediating party is sent a letter indicating that all the terms of the Administrative Order on Consent have been met.

In Missouri, the Department will issue a No Further Action Letter after determining that the remedial criteria set forth in the approved Remedial Action Plan have been met and all applicable fees paid. The Department reserves the right to require the party to conduct additional environmental assessments or remedial actions in the event that contamination is detected at the site in the future.

Indiana provides a Certificate of Completion to a party upon satisfactory completion of a remedial action plan. In addition, the State provides the party with a covenant Not to Sue for any liability or claim resulting from the release addressed in the plan.

Liability Provisions

The sole liability provision in most of the State programs is the No Further Action Letter or a similar mechanism, which does not release the party from liability. A No Further Action Letter does not preclude the State from taking further action in the event that additional contamination is discovered. In Oregon, a party can also attempt to enter into a Covenant Not to Sue which is negotiated on a site-by-site basis. Minnesota has a series of limited liability provisions: 1) a Certificate of Completion provides that the Department will never initiate an enforcement action against non-responsible parties and lenders and successors to the property; 2) non-responsible parties who undertake and complete voluntary remediation action are protected from liability for the cleanup; 3) responsible and non-responsible parties can enter into covenants not to sue on a site-by-site basis; 4) non-responsible parties who perform voluntary investigation and cleanup work are protected from liability for contributing to and aggravating contamination; and 5) any party is protected from future cleanup liability if it is determined that the source of contamination is an off-site source.

Reopening Provisions

Eleven of 16 State programs have similar reopening provisions. The States reserve the right to reopen the site if previously unavailable information indicates that the site poses a threat to human health and the environment. This is stipulated in the No Further Action Letter or Certificate of Completion received at sign-off. In Indiana, the Department will reopen only if it finds that information provided by the party was false. Otherwise, the covenant not to sue applies, and accompanies transfer of land ownership. In Massachusetts, the Department does not issue a final sign-off and the site may be reopened at any time. A set percentage of sites are audited by the Department within five years after completion of cleanup to ensure further contamination has not occurred. Illinois reserves the right to reopen for any reason.

State Views: Program Keys and EPA Support

In response to ELI's survey, the States identified key aspects of their "voluntary" programs which expedite cleanups and achieve the desired results. These are: 1) total cooperation from the responsible or private party; 2) the absence of a protracted administrative process; 3) the application of uniform cleanup standards for groundwater, surface water, and soil; 4) the remedial workplan procedures and schedule established by a consent agreement; and 5) the ability to streamline the RI/FS process. The types of support U.S. EPA could provide to these State programs were identified as follows: 1) funding for State program staff; 2) uniform cleanup standards for groundwater, surface water, and soils; 3) technology transfer opportunities; 4) State staff training; 5) model program procedural guidelines; and 6) endorsement of the State program to assure private parties that subsequent Federal action would not be taken (except under limited conditions).

CHAPTER V
STATE PROGRAM TABLES

TABLE V-1

Overview of State Programs

SUMMARY

This table provides an overview of four key elements of State cleanup programs; enforcement authority, staffing level, fund balance, and public participation procedures. These elements mirror the criteria for State superfund programs as discussed in Chapter III; Overview of State Programs. This Table provides a useful comparison of State programs when the elements are viewed as integral parts of each State's program. These elements were not selected for the purpose of evaluating the size or effectiveness of state programs. Differences in program terminology, administrative and accounting procedures, and the detail of program information provided by the State make direct comparison of individual program elements difficult. Therefore, this tabulation of State information provides a picture of the general programmatic direction and activity levels of State programs.

The table headings are defined as follows:

- "Cleanup Enforcement Authority" indicates whether or not States undertake enforcement actions under specific hazardous cleanup authority ("Yes"), a ground water protection statute ("GW"), a hazardous waste enforcement statute ("HW"), or a general environmental protection authority ("Gen").

- "Staffing Level" indicates the number of full-time program staff and attorneys who work on each State program. (Attorneys in both State cleanup programs and State AG's Offices are included in this figure.) There is a possibility of double counting, as some States may have counted attorneys who work full-time on superfund programs as staff.

- "Fund Balance" lists the balance of each State's cleanup fund at the end of fiscal year 1993. If a State has multiple cleanup funds, this column indicates the sum of the balances. The balances, which range from zero to almost a billion dollars, do not signify the extent of cleanup activity on their own. The fund balance may be small because significant cleanup expenditures were made during the year, or it may be large because little activity occurred during the year. A State's balance amount is meaningful only when viewed in conjunction with the number of actions taken by the State, and as an indicator of future financial capability.

- "Public Participation Requirements or Policy" indicates whether each State has statutory or regulatory public participation requirements or follows public participation procedures as a matter of policy.

TABLE V-1
OVERVIEW OF STATE PROGRAMS

Region	State	Cleanup Enforcement Authority	Staffing Level	Fund Balance	Public Participation Requirements or Policy
1	CT	Yes	51	$21,775,000	Pol.
	ME	Yes	29	$5,700,000	Pol.
	MA	Yes	260	$23,600,000	Req.
	NH	Yes	8	$3,000,000	Pol.
	RI	Yes	34	$2,000,000	None
	VT	Yes	21	$1,544,426	Req.
2	NJ	Yes	668	$161,500,000	Pol.
	NY	Yes	343	$905,400,000	Req.
	PR	Gen	8	$4,185,000	None
3	DE	Yes	32	$4,000,000	Req.
	DC	HW	1	$0	None
	MD	Yes	34	$14,000,000	Pol.
	PA	Yes	145	$60,500,000	Req.
	VA	Yes	25	$311,338	Pol.
	WV	HW,GW	13	$2,200,000	None
4	AL	Yes	23	$379,690	Req.
	FL	Yes	62	$8,363,000	Pol.
	GA	Yes	10	$8,260,818	None
	KY	Yes	23	$5,000,000	Pol.
	MS	HW	16	$2,700,000	Pol.
	NC	Yes	29	$3,783,852	Req.
	SC	Yes	29	$16,900,000	Pol.
	TN	Yes	51	$6,260,883	Req.
5	IL	Yes	94	$6,065,300	Req.
	IN	Yes	28	$14,907,856	Pol.
	MI	Yes	388	$18,200,000	Req.
	MN	Yes	114	$5,252,000	Req.
	OH	Yes	115	$34,680,714	Pol.
	WI	Yes	100	$24,032,917	Req.
6	AR	Yes	2	$6,202,997	Req.
	LA	Yes	44	$3,056,023	Req.
	NM	Yes	32	$103,634	Req.
	OK	Gen	11	$260,000	None
	TX	Yes	103	$30,396,128	Req.
7	IA	Yes	10	$1,006,218	Req.
	KS	Yes	18	$1,868,000	Pol.
	MO	Yes	40	$5,800,000	Req.
	NE	GW	11	$0	Req.
8	CO	GW,HW	32	$13,200,000	Pol.
	MT	Yes	28	$3,002,329	Req.
	ND	Yes	6	$79,000	Pol.
	SD	Yes	5	$1,715,767	Pol.
	UT	Yes	33	$425,000	Pol.
	WY	Gen	5	$0	Pol.
9	AZ	Yes	29	$3,743,000	Req.
	CA	Yes	265	$26,908,000	Req.
	HI	Yes	15	$222,604	Pol.

Yes = specific authority; Gen = general environmental protection authority
HW = hazardous waste authority; GW = ground water protection authority
Req. = required by statute or regulation; Pol. = state practice

TABLE V-1
OVERVIEW OF STATE PROGRAMS

Region	State	Cleanup Enforcement Authority	Staffing Level	Fund Balance	Public Participation Requirements or Policy
9	NV	HW,GW	26	$6,000,000	None
10	AK	Yes	37	$0	Pol.
	ID	Gen	21	$3,139,032	None
	OR	Yes	99	$5,476,340	Req.
	WA	Yes	114	$46,302,976	Req.

Yes = specific authority; Gen = general environmental protection authority
HW = hazardous waste authority; GW = ground water protection authority
Req. = required by statute or regulation; Pol. = state practice

TABLE V-2

Statutory Authorities

SUMMARY

- 45 States have Funds that can be used for a range of cleanup activities (full Fund capabilities).
- 2 States have no Fund.
- 5 States have limited Fund capabilities, in that, their Funds can only be used for emergency responses and/or CERCLA match.
- 47 States have State superfund laws that provide enforcement authorities.
- 45 States have statutes providing both full Fund capabilities and enforcement authorities.
- 5 States have enforcement authorities only in statutes other than their State superfund laws.
- 26 States have statutory provisions for a priority list.
- 17 States report some authority for citizen suits.
- 15 States provide compensation for victims of hazardous waste releases, although 10 States limit that relief to replacement of water supplies.
- 23 States have some provisions governing property transfers, not including States which have only superliens and/or data bases.

TABLE V-2
STATUTORY AUTHORITIES AND PROVISIONS

Region	State	Statute	Cleanup Fund	Enforcement Authority	Priority List	Citizen Suit	Victim Comp	Property Transfer
1	CT	Public Act 87-561		X	X			
		Water Pollution Control Laws		X				
		Transfer of Hazardous Waste Establishments Program						X
		Urban Sites Remedial Action Program	X					X
		Emergency Spill Response Fund	X	X			WS	
	ME	Property Transfer Statute (P.L. 355, 1993)						X
		An Act to Assist in the Cleanup of Contaminated Property (Innocent Landowner Protection)						
		Uncontrolled Hazardous Substance Sites Act	X	X				
	MA	Oil and Hazardous Material Release Prevention and Response Act	X	X	X	X		
	NH	New Hampshire Hazardous Waste Laws	X	X				
	RI	Hazardous Waste Management Act	X	X		X	X	
	VT	Solid Waste Management Law		X				
		An Act Relating to Administrative Enforcement of Specified Environmental Laws (Act 98)		X				
		Water Pollution Control Law	X				X	
2	NJ	Industrial Sites Recovery Act, amending Environmental Cleanup Responsibility Act		X				X
		Spill Compensation and Control Act, as amended.	X	X			X	
	NY	Abandoned Sites Act of 1979		X	X		WS	X
		New York State Superfund Act	X					
		Environmental Quality Bond Act of 1986	X					
	PR	Public Policy Environmental Act		X				
		Environmental Emergencies Fund Act, Law 81 (1987)	X					
3	DE	Hazardous Substance Cleanup Act	X	X	X			
	DC	Hazardous Waste Management Act		X				
	MD	Ann. Code of Maryland, Environment Article, Title 7 - Hazardous Material and Hazardous Substances	X	X	X		WS	
	PA	Hazardous Sites Cleanup Act (HSCA) (Act 108) 1988	X	X	X	X	WS	X
	VA	Waste Management Act	X	X				
	WV	Groundwater Protection Act						
		Hazardous Waste Management Act		X				X

ER: EMERGENCY RESPONSE AND REMOVALS
CS: CERCLA SHARE
WS: WATER SUPPLIES
O: OTHER STATUTES

TABLE V-2
STATUTORY AUTHORITIES AND PROVISIONS

Region	State	Statute	Cleanup Fund	Enforcement Authority	Priority List	Citizen Suit	Victim Comp	Property Transfer
3	WV	Hazardous Waste Emergency Response Fund Act	X					
4	AL	Hazardous Substance Cleanup Fund	X	X				
	FL	Pollutant Discharge Prevention and Removal Act	X	X			WS	
		Resource Recovery and Management Act	X	X				
	GA	Hazardous Site Response Act of 1992	X	X	X			X
	KY	KRS 224.46-580(13) and KRS 224.01-400	X	X	X	X		
	MS	Property Transfer Law						X
		Air and Water Pollution Control Act		X				
		Solid Waste Disposal Act of 1974	X	X				
		Pollution Emergency Fund	X					
	NC	Solid and Hazardous Waste Management Act	X	X			WS	X
		Inactive Hazardous Sites Response Act of 1987	X	X	X			X
	SC	Hazardous Waste Management Act	X	X	X			X
	TN	Hazardous Waste Management Act of 1983	X	X	X			X
5	IL	Environmental Protection Act	X	X				
		Responsible Party Transfer Act						X
	IN	Responsible Property Transfer Law						X
		Hazardous Waste Act	X	X	X			
		Hazardous Substance Response Trust Fund	X					
		Environmental Management Act		X				
	MI	Environmental Response Act	X	X		X		X
	MN	Environmental Response and Liability Act	X	X	X	X	X	X
	OH	Solid and Hazardous Waste Disposal Law	X	X		X		
	WI	Hazardous Substance Spill Statute		X				
		Abandoned Containers Statute		X				
		Environmental Repair Statute	X	X	X			
6	AR	Remedial Action Trust Fund	X	X	X			
		Emergency Response Fund Act	X	X				
	LA	Hazardous Waste Control Law	ER,CS	X				
		Inactive and Abandoned Hazardous Waste Site Law	ER		X			X
		Environmental Quality Law	X	X		X		X
		Liability for Hazardous Substance Remedial Action		X				

ER: EMERGENCY RESPONSE AND REMOVALS
CS: CERCLA SHARE
WS: WATER SUPPLIES
O: OTHER STATUTES

TABLE V-2
STATUTORY AUTHORITIES AND PROVISIONS

Region	State	Statute	Cleanup Fund	Enforcement Authority	Priority List	Citizen Suit	Victim Comp	Property Transfer
6	NM	Water Quality Act		X				
		Hazardous Waste Act	ER,CS	X				
	OK	Hazardous Waste Fund Act	ER					
		Hazardous Waste Disposal Act	ER,CS					
		Environmental Quality Act	X	X				
	TX	Texas Property Code						X
		Solid Waste Disposal Act	X	X	X			
		Hazardous Substances Spill Prevention and Control Act	X					
7	IA	Environmental Quality Act	X	X	X	X	WS	X
		Groundwater Protection Act						
		Groundwater Hazard Documentation Law						X
	KS	Environmental Response Act	X	X				
	MO	Hazardous Waste Management Law	X	X	X			X
		Voluntary Cleanup Law						X
	NE	Environmental Protection Act		X		X		
8	CO	Hazardous Waste Sites Act	CS	X				
	MT	Comprehensive Environmental Cleanup and Responsibility Act	X	X	X			
		State Participation in CERCLA	X					
	ND	Hazardous Waste Management Act		X				
		Water Pollution Control Law		X				
		Environmental Quality Restoration Fund	X			O		
	SD	Hazardous Waste Management Act		X				
		Regulated Substance Discharge Law	X	X				
	UT	Hazardous Substances Mitigation Act	X	X	X			
	WY	Environmental Quality Act	ER	X		X		X
9	AZ	Environmental Lien Authority						
		Environmental Quality Act	X	X	X	X		
	CA	Health and Safety Code						X
		Hazardous Substance Account Act	X	X	X	X	X	
	HI	Environmental Response Law	X	X	X	X	WS	
	NV	Water Pollution Control Law		X				
		Rev. Stat. "Hazardous Waste Statute"	ER,CS	X				
10	AK	Hazardous Substance Release Control Law		X				
		Oil and Hazardous Substance Releases Law	X		X			

ER: EMERGENCY RESPONSE AND REMOVALS
CS: CERCLA SHARE
WS: WATER SUPPLIES
O: OTHER STATUTES

TABLE V-2
STATUTORY AUTHORITIES AND PROVISIONS

Region	State	Statute	Cleanup Fund	Enforcement Authority	Priority List	Citizen Suit	Victim Comp	Property Transfer
10	AK	Liability and Cost for Oil and Hazardous Substances Discharge Law		X				
	ID	Hazardous Waste Management Act	ER	X		X		
	OR	Environmental Cleanup Law	X	X	X			
	WA	Model Toxics Control Act	X	X	X	X	WS	

ER: EMERGENCY RESPONSE AND REMOVALS
CS: CERCLA SHARE
WS: WATER SUPPLIES
O: OTHER STATUTES

TABLE V-3

Program Organization

SUMMARY

- Program staff levels range from 2 staff members to approximately 640.
- Only 8 States now have program staff levels below 10 FTE.
- The overall program staff level was 3,491 FTE, up from 3,394 in 1991.
- 23 States rely solely on the State AG's office for legal support.
- 14 States rely solely on the responsible agency for legal support.
- Total legal support was 247 FTE attorneys, down from 262 in 1991.

TABLE V-3
PROGRAM ORGANIZATION

Region	State	Agency	Program	Staff	Legal Support	Number of Attorneys
1	CT	Department of Environmental Protection	Bureau of Water Management	48	AG's Office (2-3)	2.5
	ME	Department of Environmental Protection	Division of Site Investigation and Remediation	27	AG's Office (1.5)	1.5
	MA	Department of Environmental Protection	Bureau of Waste Site Cleanup	240	DEP Office of General Counsel (12) AG's Office (8)	20.0
	NH	Department of Environmental Services	Waste Management Division	5	Department of Justice (3)	3.0
	RI	Department of Environmental Management	Division of Site Remediation	31	Office of Legal Services (0.75) AG's Office (2)	2.8
	VT	Department of Environmental Conservation	Sites Management Section	14	DEC Enforcement Div. (2) AG's Office (4) Program Attorney (1)	7.0
2	NJ	Department of Environmental Protection and Energy	Site Remediation Program	640	AG's Office (28)	28.0
	NY	Department of Environmental Conservation	Division of Hazardous Waste Remediation	318	NYSDEC Division of Environ. Enforcement (18) AG's Office (7)	25.0
	PR	Environmental Quality Board	SARA and Emergency Response Office	7	EQB Legal Division (1)	1.0
3	DE	Department of Natural Resources and Environmental Control	Superfund Branch	31	Department of Justice (1)	1.0
	DC	Department of Consumer and Regulatory Affairs	No superfund program		UST Division (0.8) Hazardous Waste Program (0.2)	1.0
	MD	Department of the Environment	Environmental Response & Restoration Program	32	AG's Office (1.5)	1.5
	PA	Department of Environmental Resources	Hazardous Sites Cleanup Program	127	DER Chief Counsel's Office (18)	18.0
	VA	Department of Environmental Quality	Office of Superfund Program	24	AG's Office (0.5)	0.5
	WV	Department of Commerce, Labor and Environmental Resources	Site Investigation & Response Section	12	AG's Office (1)	1.0
4	AL	Department of Environmental Management	Special Projects Office	23	DEM Office of General Counsel (0.3)	0.3
	FL	Department of Environmental Protection	Bureau of Waste Cleanup	60	DEP Office of General Counsel (2)	2.0
	GA	Department of Natural Resources	Hazardous Sites Response Program	9	Law Department (1)	1.0
	KY	Department for Environmental Protection	Superfund Branch	21	Department of Law (2)	2.0
	MS	Department of Environmental Quality	Superfund Branch	12	Department of Environmental Quality	4.0
	NC	Department of Environment, Health, and Natural Resources	Division of Solid Waste Management	28	Department of Justice (1)	1.0

TABLE V-3
PROGRAM ORGANIZATION

Region	State	Agency	Program	Staff	Legal Support	Number of Attorneys
4	SC	Department of Health and Environmental Control	Bureau of Solid and Hazardous Waste Management	27	DHEQ Legal Office (2)	2.0
	TN	Department of Environment and Conservation	Division of Superfund	49	Office of General Counsel (1.5) AG's Office (0.5)	2.0
5	IL	Environmental Protection Agency	Remedial Projects Management Section	91	Remedial Projects Management Section (3)	3.0
	IN	Department of Environmental Management	Branch Chief, Project Management Branch	21	Office of Legal Counsel (6) AG's Office (1)	7.0
	MI	Department of Natural Resources	Superfund Section	381	AG's Office (7)	7.0
	MN	Pollution Control Agency	Site Response Section	110	AG's Office (4)	4.0
	OH	Environmental Protection Agency	Division of Emergency and Remedial Response	107	EPA (5) AG'S Office (3)	8.0
	WI	Department of Natural Resources	Emergency and Remedial Response Section	97	Bureau of Legal Services (3)	3.0
6	AR	Department of Pollution Control and Ecology	Superfund Branch	2	DPC&E, AG's Office	--
	LA	Department of Environmental Quality	Office of Legal Affairs and Enforcement	43	Office of Legal Affairs and Enforcement (1)	1.0
	NM	NM Environment Department	Superfund Section	30	NMED General Counsel (1.5)	1.5
	OK	Department of Health	Solid Waste Management Service	10	Department of Health (1)	1.0
	TX	Texas Water Commission	Pollution Cleanup Division	102	Legal Services Division (1)	1.0
7	IA	Department of Natural Resources	Solid Waste Section	10	DNR Enforcement and Compliance Bureau (<.5)	0.5
	KS	Department of Health and Environment	Bureau of Environmental Remediation	15	DHE Office of Legal Services (2.5)	2.5
	MO	Department of Natural Resources	Hazardous Waste Program, Superfund Section	35	AG's Office (5)	5.0
	NE	Department of Environmental Quality	Superfund Section	10	Department of Environmental Quality	1.0
8	CO	Department of Health	Hazardous Materials and Waste Management Division	18	AG's Office (<14)	14.0
	MT	Department of Health and Environmental Sciences	Superfund Section	25	Department of Health and Environmental Sciences (3)	3.0
	ND	The Department of Health and Consolidated Laboratories	Division of Waste Management	5	AG's Office (1)	1.0
	SD	Department of Environment and Natural Resources	Ground Water Quality Resources	3	DENR, AG's Office (2 total)	2.0
	UT	Department of Environmental Quality	CERCLA Branch	30	Division of Environmental Response and Remediation (1) AG's Office (2)	3.0
	WY	Department of Environmental Quality	No superfund program		AG's Office (5)	5.0

TABLE V-3
PROGRAM ORGANIZATION

Region	State	Agency	Program	Staff	Legal Support	Number of Attorneys
9	AZ	Department of Environmental Quality	Remedial Projects Section	26	AG's Office (3)	3.0
	CA	Department of Toxic Substances Control	Site Mitigation Program	235	AG's Office, Office of Legal Counsel and Criminal Investigation (30 total)	30.0
	HI	Department of Health	Hazard Evaluation and Emergency Response Office (HEER)	15	AG's Office (0.25)	0.3
	NV	Department of Conservation and Natural Resources	Bureau of Corrective Actions	24	AG's Office (2)	2.0
10	AK	Department of Environmental Conservation	Contaminated Sites Remediation Program	36	AG's Office (<1)	1.0
	ID	Department of Health and Welfare	Remediation Activities Bureau	17	AG's Office (4)	4.0
	OR	Department of Environmental Quality	Waste Management and Cleanup Division	98	Department of Justice (1)	1.0
	WA	Department of Ecology	Toxics Cleanup Program	110	AG's Office (3-4)	3.5
Total:				3491		246.4

TABLE V-4

Program Administration and Staff; Funding Sources

SUMMARY

- 27 States use State general funds for program administration and staff.
- 39 States use State cleanup funds for program administration and staff.
- 50 States use Federal funds for program administration and staff.

TABLE V-4
PROGRAM ADMINISTRATION AND STAFF: FUNDING SOURCES

Region	State	State General Fund	Cleanup Fund	Federal Grants	Other
1	Connecticut	59%		23%	18% (Spill Fund)
	Maine	X	X	X	
	Massachusetts	40%	30%	10%	20% (Other State funds)
	New Hampshire		80%	20%	
	Rhode Island		X	X	
	Vermont	23%	2%	75%	
2	New Jersey		X	X	(Bond Fund, PRP reimbursements)
	New York	1%	92%	7%	
	Puerto Rico		10%	90%	
3	Delaware	10%	20%	63%	7% (DOD Grant)
	District of Columbia			X	
	Maryland		X	X	
	Pennsylvania		X		
	Virginia	10%		90%	
	West Virginia		20%	80%	
4	Alabama	X	X	X	(Cleanup fund funded by hazardous waste disposal fees)
	Florida	X	X	X	(Trust funds)
	Georgia		100%		
	Kentucky	X	X	50%	
	Mississippi	X	X	X	
	North Carolina	X		X	
	South Carolina	15%	19%	66%	
	Tennessee	X	X	28%	21% (Fees on generation, treatment and shipment of hazardous waste)
5	Illinois	7%	83%	10%	

X = SIGNIFICANT FUNDING SOURCE, BUT NO PERCENTAGE AVAILABLE

TABLE V-4
PROGRAM ADMINISTRATION AND STAFF: FUNDING SOURCES

Region	State	State General Fund	Cleanup Fund	Federal Grants	Other
5	Indiana	75%	5%	20%	
	Michigan	35%	50%	15%	
	Minnesota		60%	40%	
	Ohio		75%	25%	(Solid waste disposal fees)
	Wisconsin		X	X	
6	Arkansas		X	X	
	Louisiana	50%		50%	
	New Mexico	X		X	X
	Oklahoma	15%	5%	80%	
	Texas		X	X	
7	Iowa		5%	75%	20% (Solid Waste Account)
	Kansas	X	X	X	(Petroleum Storage Tank Trust Fund)
	Missouri		X	X	
	Nebraska	10%		90%	
8	Colorado		10%	60%	30% (PRP Cost Reimbursement)
	Montana		X	X	
	North Dakota	X		X	
	South Dakota	10%		90%	
	Utah	4%		96%	
	Wyoming	X		X	
9	Arizona		58%	42%	
	California		X	X	(Fees, cost recovery, and reimbursements)
	Hawaii	10%		90%	
	Nevada		80%	20%	
10	Alaska		68%	32%	

X = SIGNIFICANT FUNDING SOURCE, BUT NO PERCENTAGE AVAILABLE

TABLE V-4
PROGRAM ADMINISTRATION AND STAFF: FUNDING SOURCES

Region	State	State General Fund	Cleanup Fund	Federal Grants	Other
10	Idaho			X	(Responsible parties)
	Oregon		X	X	
	Washington		75%	25%	

X = SIGNIFICANT FUNDING SOURCE, BUT NO PERCENTAGE AVAILABLE

TABLE V-5

Hazardous Sites

SUMMARY

- The number of known and suspected non-NPL sites in States range from 0 (District of Columbia) to 26,000 (California).
- The number of known and suspected non-NPL sites has increased by approximately 38% since 1991, to a total of over 100,000 sites.
- The number of non-NPL sites identified by States as needing attention ranges from 0 (District of Columbia) to 12,894 (New Jersey).
- The number of non-NPL sites identified by States as needing attention has increased by almost 220% since 1991 to over 40,000 sites.
- The total number of sites on State inventories or priority lists has increased by 39% to over 20,000 sites since 1991.
- Thirty-six States reported use of State inventories or priority lists.

TABLE V-5
HAZARDOUS SITES

Region	State	Final NPL Sites	Proposed NPL Sites	Deleted NPL Sites	Known and Suspected State Sites	State Sites Identified as Needing Attention	State Inventory or Priority List
1	Connecticut	15	0	0	1475	579	642
	Maine	9	1	0	370	160	370
	Massachusetts	24	6	1	6328	5867	524
	New Hampshire	17	0	0	250	250	250
	Rhode Island	12	0	0	300	60	-
	Vermont	8	1	0	1291	1291	568
2	New Jersey	108	1	5	18519	12894	774
	New York	83	2	1	995	680	935
	Puerto Rico	9	1	0	-	-	-
3	Delaware	19	0	2	288	89	30
	District of Columbia	0	0	0	0	0	-
	Maryland	9	3	1	463	343	25
	Pennsylvania	98	1	8	3000	50	10
	Virginia	23	2	1	3100	310	-
	West Virginia	5	1	0	500	-	51
4	Alabama	12	2	1	625	125	-
	Florida	55	3	4	1015	725	-
	Georgia	13	0	0	800	-	-
	Kentucky	18	2	0	1000	500	12
	Mississippi	2	2	1	390	200	109
	North Carolina	21	1	1	665	655	155
	South Carolina	24	0	0	475	200	100
	Tennessee	14	1	1	1142	157	157
5	Illinois	31	1	2	1400	147	-
	Indiana	36	1	5	1549	82	60
	Michigan	78	4	2	9785	9785	9785
	Minnesota	42	1	0	542	184	184

DASH = NO FIGURE AVAILABLE

TABLE V-5
HAZARDOUS SITES

Region	State	Final NPL Sites	Proposed NPL Sites	Deleted NPL Sites	Known and Suspected State Sites	State Sites Identified as Needing Attention	State Inventory or Priority List
5	Ohio	34	2	0	1200	771	100
	Wisconsin	39	1	0	4000	565	565
6	Arkansas	10	0	1	351	101	7
	Louisiana	12	0	0	1014	184	1287
	New Mexico	10	2	1	600	220	410
	Oklahoma	10	1	0	-	-	-
	Texas	27	3	1	1200	83	38
7	Iowa	19	5	1	900	200	67
	Kansas	13	2	3	450	200	396
	Missouri	23	0	0	1253	163	51
	Nebraska	7	3	0	370	120	-
8	Colorado	16	3	1	-	-	-
	Montana	8	0	0	265	265	265
	North Dakota	2	1	0	-	-	-
	South Dakota	3	1	0	218	218	218
	Utah	12	1	0	200	31	13
	Wyoming	3	0	0	-	-	-
9	Arizona	11	0	1	450	65	25
	California	96	6	-	26000	350	350
	Hawaii	2	1	0	2500	-	-
	Nevada	1	0	0	145	145	-
10	Alaska	7	0	0	1051	1051	1051
	Idaho	8	2	1	220	50	-
	Oregon	9	3	-	1235	102	63
	Washington	52	-	1	1029	628	401

DASH = NO FIGURE AVAILABLE

TABLE V-6

Funding of State Cleanup Activities

SUMMARY

- 50 States have cleanup funds; 2 States have no fund.
- 22 States have more than one Fund or Account.
- Total State superfund balance for all States is $1523.4M, including $967.2M authorized in bonds in 4 States.
- The average State fund balance, excluding bond authorizations, is $11.6M, the same as it was in 1991.
- The median State fund balance, including bond authorizations, is $5.15M. The median State balance, excluding bond authorizations, is $3.89M.
- Including bond authorizations, fund balances (Alaska and Wyoming provided no information) are distributed as follows:
    - 2 States have no fund (NE and DC).
    - 7 States have less than $1M.
    - 15 States have between $1M and $5M.
    - 11 States have between $5M and $10M.
    - 12 States have between $10M and $50M.
    - 3 States have more than $50M.
- For the 46 States providing information, total annual additions to State funds are $957.3M (a 150% increase over 1990).

TABLE V-6
FUNDING OF STATE CLEANUP ACTIVITIES

Region	State	Fund	Fund Balance	Date	Additions During FY
1	Connecticut	Emergency Spill Response Fund	$6,775,000	6/30/93	$0
		Urban Site Remedial Action	$15,000,000	6/30/93	$10,000,000
	Maine	Uncontrolled Sites Fund	$3,100,000	12/92	$869,000
		Landfill Closure and Remediation Bond Account	$1,000,000	12/92	$10,700,000
		Uncontrolled Sites Bond Account	$1,600,000	10/93	$1,900,000
	Massachusetts	Environmental Challenge Fund	$1,600,000	6/30/93	$5,700,000
		Bond Fund	$22,000,000	6/30/93	$0
	New Hampshire	Bond Fund	$0	6/30/93	
		Hazardous Waste Cleanup Fund	$3,000,000	6/30/93	$1,200,000
	Rhode Island	Environmental Response Fund	$2,000,000	6/30/93	
	Vermont	Environmental Contingency Fund	$938,030	10/31/93	$1,233,444
		Petroleum Cleanup Fund	$606,396	10/31/93	$3,698,578
2	New Jersey	Bond Fund	$112,200,000	6/30/93	$239,500,000
		Spill Compensation Fund	$44,100,000	6/30/93	$85,200,000
		Hazardous Discharge Site Cleanup Fund	$5,200,000	6/30/93	$25,400,000
	New York	Hazardous Waste Remedial Fund	$2,700,000	3/31/93	$54,000,000
		1986 Environmental Quality Bond Act	$902,700,000	3/31/93	$0
	Puerto Rico	Environmental Emergencies Fund	$4,185,000	6/30/93	$1,000,000
3	Delaware	Hazardous Substance Cleanup Fund	$4,000,000	6/30/93	$2,830,000
	District of Columbia	None			
	Maryland	Subaccount of Hazardous Substance Control Fund	$14,000,000	11/93	
	Pennsylvania	Hazardous Sites Cleanup Fund	$60,500,000	6/30/93	$45,577,000
	Virginia	Virginia Environmental Emergency Response Fund	$311,338	5/28/93	$94,144
	West Virginia	Hazardous Waste Emergency Response Fund	$2,200,000	6/30/93	$1,104,569
4	Alabama	Hazardous Substance Cleanup Fund	$379,690	9/30/93	$348,164
	Florida	Hazardous Waste Management Trust Fund	$863,000	6/30/93	
		Water Quality Assurance Trust Fund	$7,500,000	6/30/93	$25,000,000
	Georgia	Hazardous Waste Trust Fund	$8,260,818	6/30/93	$2,326,017
	Kentucky	Hazardous Waste Management Fund	$5,000,000	6/30/93	$3,000,000

TABLE V-6
FUNDING OF STATE CLEANUP ACTIVITIES

Region	State	Fund	Fund Balance	Date	Additions During FY
4	Mississippi	Pollution Emergency Response Fund	$2,700,000	6/30/93	$500,000
	North Carolina	Emergency Response Fund	$500,000	6/30/93	
		Inactive Hazardous Sites Cleanup Fund	$1,383,852	6/30/93	$865,599
		Cost Share Trust Fund	$1,900,000	6/30/93	$800,000
	South Carolina	Hazardous Waste Contingency Fund	$16,900,000	6/30/93	$3,500,000
	Tennessee	Hazardous Waste Remedial Action Fund	$6,260,883		$2,472,287
5	Illinois	Hazardous Waste Fund	$6,065,300	6/30/93	$8,469,700
	Indiana	State Match (Superfund)	$494,983	6/30/93	$1,917,733
		Continental Steel Corporation	$4,612,873	6/30/93	$668,656
		Hazardous Substances Response Trust Fund	$9,800,000	6/30/93	$2,500,000
	Michigan	Act 307	$9,800,000	6/30/93	$22,900,000
		Superfund	$0	6/30/93	$656,000
		Environmental Protection Bond Fund	$8,400,000	6/30/93	$55,300,000
	Minnesota	Minnesota Environmental Response and Liability Act	$5,252,000	6/30/93	$4,290,000
	Ohio	Hazardous Waste Clean-up Fund	$13,255,486	6/30/93	$10,235,240
		Hazardous Waste Facility Management Fund	$21,425,228	6/30/93	$10,128,790
	Wisconsin	Environmental Fund	$3,532,917	6/30/93	$4,110,000
		Bonding Authority	$20,500,000	6/30/93	$0
6	Arkansas	Emergency Response Fund	$139,199	6/30/93	$129,224
		Hazardous Substance Remedial Action Fund	$6,063,798	6/30/93	$1,565,615
	Louisiana	Hazardous Waste Site Cleanup Fund	$3,056,023	10/93	$943,977
	New Mexico	State Groundwater Remediation Account	$55,642	6/30/93	$210,000
		Potential Responsible Party Program	$33,066	6/30/93	$55,451
		Hazardous Waste Emergency Fund	$14,926	11/1/93	$21,000
	Oklahoma	Hazardous Waste Fund	$260,000	6/30/93	$200,000
	Texas	Hazardous and Solid Waste Remediation Fee Fund (Fund 550)	$30,104,137	8/31/93	$112,293,147
		Spill Response Fund	$291,991	8/31/93	$0
7	Iowa	Hazardous Waste Remedial Fund	$1,006,218	6/30/93	$254,683
	Kansas	Environmental Response Fund	$468,000	6/30/93	

TABLE V-6
FUNDING OF STATE CLEANUP ACTIVITIES

Region	State	Fund	Fund Balance	Date	Additions During FY
7	Kansas	State Water Plan Fund	$1,400,000	6/30/93	$3,100,000
	Missouri	Hazardous Waste Remedial Fund	$5,800,000	6/30/93	$2,500,000
	Nebraska	None			
8	Colorado	Natural Resource Damage Recovery Fund	$1,600,000	6/30/93	$1,000,000
		Hazardous Substances Response Fund	$11,600,000	6/30/93	$3,160,000
	Montana	Environmental Quality Protection Fund	$1,500,000	6/30/93	$675,000
		Hazardous Waste/CERCLA Special Revenue Account	$1,502,329	6/30/93	$1,098,286
	North Dakota	Environmental Restoration Fund	$79,000	6/30/93	
	South Dakota	The Regulated Substances Response Fund	$1,715,767	6/30/93	$664,254
	Utah	Hazardous Substance Mitigation Fund	$425,000	6/30/93	$250,000
	Wyoming	Trust and Agency Account Fund			
9	Arizona	Water Quality Assurance Revolving Fund	$3,743,000	6/30/93	$4,515,500
	California	Hazardous Waste Control Account	$14,000,000		$107,000,000
		Hazardous Substance Cleanup Bond Fund	$12,908,000		
	Hawaii	Environmental Response Revolving Fund	$222,604	6/30/93	$255,060
	Nevada	Hazardous Waste Management Fund	$6,000,000		$6,000,000
10	Alaska	Oil and Hazardous Substance Release Response Fund			
	Idaho	Hazardous Waste Emergency Account	$234,700	9/30/93	$43,700
		Hazardous Waste Training, Emergency and Monitoring Account	$2,904,332	6/30/93	$3,116,429
	Oregon	Orphan Site Account	$2,963,537	6/30/93	$7,300,000
		Hazardous Substance Remedial Action Fund	$2,512,803	6/30/93	$5,390,000
	Washington	State Toxic Control Account	$4,825,666	6/30/92	$24,344,653
		Local Toxic Control Account	$41,477,310	6/30/93	$21,264,889
Total:			$1,523,409,842		$957,345,789

TABLE V-7

Sources of State Cleanup Funds

SUMMARY

- Sources of funds comprising more than 20% of fund additions are:
  - Fees (26 funds in 25 States)
  - Appropriations (21 funds in 17 States)
  - Bonds (17 funds in 12 States)
  - Penalties and fines (16 funds in 14 States)
  - Taxes (11 funds in 10 States)
  - Cost recoveries (17 funds in 14 States)

TABLE V-7
SOURCES OF STATE CLEANUP FUNDS

Region	State	Fund	A	B	CR	F	I	P	PF	R	T
1	CT	Emergency Spill Response Fund		s							
		Urban Site Remedial Action		s							
	ME	Uncontrolled Sites Fund	m	s	s	m	m	m	s	m	m
		Landfill Closure and Remediation Bond Account	m	s	s	m	m	m	s	m	m
		Uncontrolled Sites Bond Account	m	s	s	m	m	m	s	m	m
	MA	Environmental Challenge Fund			s	s		s			
		Bond Fund		s							
	NH	Bond Fund		s							
		Hazardous Waste Cleanup Fund			s	s			s		
	RI	Environmental Response Fund		s	m			m			
	VT	Environmental Contingency Fund									s
		Petroleum Cleanup Fund	m		m	s	m				
2	NJ	Bond Fund		s							
		Spill Compensation Fund	m		m		m	m	m	m	s
		Hazardous Discharge Site Cleanup Fund			s		m				
	NY	Hazardous Waste Remedial Fund	s	s	m	s					
		1986 Environmental Quality Bond Act		s							
	PR	Environmental Emergencies Fund	s		s						
3	DE	Hazardous Substance Cleanup Fund			m		m	m			s
	DC	None									
	MD	Subaccount of Hazardous Substance Control Fund		s	m						
	PA	Hazardous Sites Cleanup Fund			m	m	m	m			s
	VA	Virginia Environmental Emergency Response Fund					m	s			
	WV	Hazardous Waste Emergency Response Fund				s					
4	AL	Hazardous Substance Cleanup Fund	s		s	m		s			
	FL	Hazardous Waste Management Trust Fund			s		m	s		m	
		Water Quality Assurance Trust Fund			m	s	m	m		m	s
	GA	Hazardous Waste Trust Fund				s	m	m			
	KY	Hazardous Waste Management Fund			m	s	m	m			
	MS	Pollution Emergency Response Fund			s			s			
	NC	Emergency Response Fund						s			
		Inactive Hazardous Sites Cleanup Fund	s		m		m	s		m	

s = MAJOR FUNDING SOURCE (>20%) m = MINOR FUNDING SOURCE (<20%)
A: APPROPRIATIONS P: PENALTIES T: TAXES CR: COST RECOVERIES
PF: PRIVATE FUNDS R: TRANSFERS I: INTEREST B: BONDS F: FEES

TABLE V-7
SOURCES OF STATE CLEANUP FUNDS

Region	State	Fund	A	B	CR	F	I	P	PF	R	T
4	NC	Cost Share Trust Fund	s								
	SC	Hazardous Waste Contingency Fund	m		m	s					
	TN	Hazardous Waste Remedial Action Fund	s		m	s	m	m			
5	IL	Hazardous Waste Fund			m	s		s			
	IN	State Match (Superfund)	s	m	m	m	m	m	m	m	m
		Continental Steel Corporation Hazardous Substances Response Trust Fund	m		m		m	m			s
	MI	Act 307	s								
		Superfund	s								
		Environmental Protection Bond Fund		s	m			m			
	MN	Minnesota Environmental Response and Liability Act	m		s		m	s			s
	OH	Hazardous Waste Clean-up Fund	s		m						
		Hazardous Waste Facility Management Fund	s			s		m			
	WI	Environmental Fund	s	s	m	s	m	m	m		m
		Bonding Authority		s							
6	AR	Emergency Response Fund						s			
		Hazardous Substance Remedial Action Fund	m		m	s	m	s			
	LA	Hazardous Waste Site Cleanup Fund	s		m		m	s			m
	NM	State Groundwater Remediation Account	s								
		Potential Responsible Party Program						m	s		
		Hazardous Waste Emergency Fund	s		m			m			
	OK	Hazardous Waste Fund	s			s					
	TX	Hazardous and Solid Waste Remediation Fee Fund (Fund 550)			m	s	m	m			
		Spill Response Fund	s					m			
7	IA	Hazardous Waste Remedial Fund			m	s					
	KS	Environmental Response Fund			m	s		m			
		State Water Plan Fund				s					
	MO	Hazardous Waste Remedial Fund	m		m	m	m	m	m		s
	NE	None									
8	CO	Natural Resource Damage Recovery Fund			s		X				
		Hazardous Substances Response Fund			s	s	m				
	MT	Environmental Quality Protection Fund			s		s	m	m		

s = MAJOR FUNDING SOURCE (>20%) m = MINOR FUNDING SOURCE (<20%)
A: APPROPRIATIONS P: PENALTIES T: TAXES CR: COST RECOVERIES
PF: PRIVATE FUNDS R: TRANSFERS I: INTEREST B: BONDS F: FEES

TABLE V-7
SOURCES OF STATE CLEANUP FUNDS

Region	State	Fund	A	B	CR	F	I	P	PF	R	T
8	MT	Hazardous Waste/CERCLA Special Revenue Account					s				
	ND	Environmental Restoration Fund			s			s			
	SD	The Regulated Substances Response Fund			m	s	m	s			
	UT	Hazardous Substance Mitigation Fund	s								
	WY	Trust and Agency Account Fund						s			
9	AZ	Water Quality Assurance Revolving Fund			s	s		m		m	m
	CA	Hazardous Waste Control Account			m	s					m
		Hazardous Substance Cleanup Bond Fund		s							
	HI	Environmental Response Revolving Fund	s		m		m	s			s
	NV	Hazardous Waste Management Fund			m	s		m			
10	AK	Oil and Hazardous Substance Release Response Fund	s								
	ID	Hazardous Waste Emergency Account			X			X			
		Hazardous Waste Training, Emergency and Monitoring Account	s			s					
	OR	Orphan Site Account		s		m	m				
		Hazardous Substance Remedial Action Fund			s	s	m	m		m	
	WA	State Toxic Control Account			m	m	m	m			s
		Local Toxic Control Account									s
Count:			31	18	48	35	32	44	10	10	19

s = MAJOR FUNDING SOURCE (>20%) m = MINOR FUNDING SOURCE (<20%)
A: APPROPRIATIONS P: PENALTIES T: TAXES CR: COST RECOVERIES
PF: PRIVATE FUNDS R: TRANSFERS I: INTEREST B: BONDS F: FEES

TABLE V-8

Fund Expenditures

SUMMARY

- A total of $711.7M was spent from States' Funds (6 States not reporting).
- A total of $459.3M was obligated from States' Funds (36 States reporting).
- $149M was spent on non-NPL sites.
- Amounts spent by States are distributed as follows:
    - 20 States spent less than $1M.
    - 9 States spent between $1M and $5M.
    - 5 States spent between $5M and $10M.
    - 6 States spent between $10M and $50M.
    - 4 States spent greater than $50M.
    - 6 States provided no information and 2 States have no Fund.
- The median amount spent by States was $2.3M.
- $522M was spent by the four States that spent more than $50M (73%).

TABLE V-8
EXPENDITURES AND OBLIGATIONS FROM STATE CLEANUP FUNDS

Region	State	Fund	Expended For NPL	Expended For non-NPL	Total Expended	Obligated For NPL	Obligated For non-NPL	Total Obligated
1	CT	Emergency Spill Response Fund	$0			$0	$5,000,000	$5,000,000
		Urban Site Remedial Action	$0			$0	$750,000	$750,000
	ME	Uncontrolled Sites Fund			$175,000	$0	$0	$0
		Landfill Closure and Remediation Bond Account			$4,300,000			$3,800,000
		Uncontrolled Sites Bond Account			$1,028,000			$2,400,000
	MA	Environmental Challenge Fund	$600,000	$3,500,000	$4,100,000	$600,000	$3,500,000	$4,100,000
		Bond Fund			$10,000,000			
	NH	Bond Fund	$760,000	$0	$760,000	$735,000	$0	$735,000
		Hazardous Waste Cleanup Fund						$108,000
	RI	Environmental Response Fund						
	VT	Environmental Contingency Fund	$0	$295,414	$295,414			
		Petroleum Cleanup Fund	$0	$3,092,182	$3,092,182			
2	NJ	Bond Fund			$127,300,000		$71,900,000	$71,900,000
		Spill Compensation Fund			$41,000,000			$40,600,000
		Hazardous Discharge Site Cleanup Fund			$20,200,000			$12,100,000
	NY	Hazardous Waste Remedial Fund			$52,000,000			
		1986 Environmental Quality Bond Act	$59,800,000	$1,100,000	$60,900,000	$2,000,000	$69,000,000	$70,700,000
	PR	Environmental Emergencies Fund			$555,000			
3	DE	Hazardous Substance Cleanup Fund	$0	$1,890,000	$1,890,000	$0	$3,000,000	$3,000,000
	DC	None						

TABLE V-8
EXPENDITURES AND OBLIGATIONS FROM STATE CLEANUP FUNDS

Region	State	Fund	Expended For NPL	Expended For non-NPL	Total Expended	Obligated For NPL	Obligated For non-NPL	Total Obligated
3	MD	Subaccount of Hazardous Substance Control Fund						
	PA	Hazardous Sites Cleanup Fund	$45,000	$11,883,000	$11,928,000	$900,000	$21,573,000	$22,473,000
	VA	Virginia Environmental Emergency Response Fund	$67,865	$0	$67,865			
	WV	Hazardous Waste Emergency Response Fund	$0	$329,476	$329,476	$348,000	$397,000	$745,000
4	AL	Hazardous Substance Cleanup Fund	$0	$80,230	$80,230			
	FL	Hazardous Waste Management Trust Fund						
		Water Quality Assurance Trust Fund						
	GA	Hazardous Waste Trust Fund	$0	$0	$0	$0	$0	$0
	KY	Hazardous Waste Management Fund	$0	$818,000	$818,000	$0	$967,000	$967,000
	MS	Pollution Emergency Response Fund	$0	$440,000	$440,000	$0	$0	$0
	NC	Emergency Response Fund						
		Inactive Hazardous Sites Cleanup Fund	$0	$0	$0	$0	$0	$0
		Cost Share Trust Fund	$0	$0	$0	$0	$0	$0
	SC	Hazardous Waste Contingency Fund	$0	$3,000,000	$3,000,000	$2,100,000	$3,000,000	$5,100,000
	TN	Hazardous Waste Remedial Action Fund	$5,594	$2,215,858	$2,221,452	$0	$249,871	$249,871
5	IL	Hazardous Waste Fund	$1,483,300	$1,632,300	$5,952,600	$2,487,200	$4,712,300	$10,748,700

TABLE V-8
EXPENDITURES AND OBLIGATIONS FROM STATE CLEANUP FUNDS

Region	State	Fund	Expended For NPL	Expended For non-NPL	Total Expended	Obligated For NPL	Obligated For non-NPL	Total Obligated
5	IN	State Match (Superfund)	$6,955	$0	$6,955			
		Continental Steel Corporation			$84,580			
		Hazardous Substances Response Trust Fund	$100,000	$3,000,000	$3,100,000	$2,700,000	$5,800,000	$8,500,000
	MI	Act 307	$0	$7,900,000	$7,900,000	$0	$5,000,000	$5,000,000
		Superfund	$400,000	$256,000	$656,000	$0	$0	$0
		Environmental Protection Bond Fund	$0	$21,300,000	$21,300,000	$0	$25,600,000	$25,600,000
	MN	Minnesota Environmental Response and Liability Act	$6,906,000	$89,000	$6,995,000	$0	$1,456,000	$1,456,000
	OH	Hazardous Waste Clean-up Fund			$8,837,901			$761,428
		Hazardous Waste Facility Management Fund			$11,171,318			$952,397
	WI	Environmental Fund	$182,700	$2,994,151	$3,126,851	$189,000		$3,210,455
		Bonding Authority			$1,950,000			
6	AR	Emergency Response Fund	$0	$121,683	$121,683	$0	$1,502	$1,502
		Hazardous Substance Remedial Action Fund	$1,336,766		$1,336,766	$0	$0	$0
	LA	Hazardous Waste Site Cleanup Fund	$0	$943,977	$943,977	$0	$1,923,932	$1,923,932
	NM	State Groundwater Remediation Account	$0	$154,358	$154,358	$0	$154,358	$154,358
		Potential Responsible Party Program	$0	$22,385	$22,385	$0	$0	$0
		Hazardous Waste Emergency Fund		$19,740	$19,740			$0
	OK	Hazardous Waste Fund	$0	$28,000	$28,000			

TABLE V-8
EXPENDITURES AND OBLIGATIONS FROM STATE CLEANUP FUNDS

Region	State	Fund	Expended For NPL	Expended For non-NPL	Total Expended	Obligated For NPL	Obligated For non-NPL	Total Obligated
6	TX	Hazardous and Solid Waste Remediation Fee Fund (Fund 550)	$84,180,587	$47,849,513	$132,030,100	$84,180,587	$45,929,145	$130,109,732
		Spill Response Fund	$0	$0	$0	$0	$0	$0
7	IA	Hazardous Waste Remedial Fund	$24,113	$100,210	$124,323	$0	$0	$0
	KS	Environmental Response Fund	$0	$160,000	$160,000	$0	$42,000	$42,000
		State Water Plan Fund	$0	$269,000	$269,000	$489,000	$904,000	$1,393,000
	MO	Hazardous Waste Remedial Fund			$2,000,000	$500,000		
	NE	None						
8	CO	Natural Resource Damage Recovery Fund	$0	$0	$0	$0	$0	$0
		Hazardous Substances Response Fund	$2,500,000	$0	$2,500,000	$7,700,000	$0	$7,700,000
	MT	Environmental Quality Protection Fund	$4,000	$627,255	$631,255			
		Hazardous Waste/CERCLA Special Revenue Account	$21,916	$851,556	$873,472			
	ND	Environmental Restoration Fund	$0	$0	$0	$0	$0	$0
	SD	The Regulated Substances Response Fund	$0	$0	$0	$0	$0	$0
	UT	Hazardous Substance Mitigation Fund	$0	$400,000	$400,000	$0	$675,000	$675,000
	WY	Trust and Agency Account Fund						
9	AZ	Water Quality Assurance Revolving Fund			$7,272,900			
	CA	Hazardous Waste Control Account			$88,600,000			

TABLE V-8
EXPENDITURES AND OBLIGATIONS FROM STATE CLEANUP FUNDS

Region	State	Fund	Expended For NPL	Expended For non-NPL	Total Expended	Obligated For NPL	Obligated For non-NPL	Total Obligated
9	CA	Hazardous Substance Cleanup Bond Fund						
	HI	Environmental Response Revolving Fund	$0	$32,456	$32,456	$0	$0	$0
	NV	Hazardous Waste Management Fund	$0	$250,000	$250,000			
10	AK	Oil and Hazardous Substance Release Response Fund		$1,600,000				$900,000
	ID	Hazardous Waste Emergency Account	$0	$23,700	$23,700	$0	$0	$0
		Hazardous Waste Training, Emergency and Monitoring Account	$0	$915,525	$915,525	$0	$70,400	$70,400
	OR	Orphan Site Account			$5,468,504			
		Hazardous Substance Remedial Action Fund			$13,277,665			
	WA	State Toxic Control Account	$1,189,918	$25,875,384	$27,065,302			
		Local Toxic Control Account	$6,685,622	$2,904,361	$9,589,983	$3,349,541	$11,988,428	$15,337,969
Total:			$166,300,336	$148,964,714	$711,672,918	$108,278,328	$283,593,936	$459,264,744

TABLE V-9

Uses of State Cleanup Funds

SUMMARY

- States are authorized to use their Funds for:
  - Emergency Response (48 States);
  - Removals (48 States);
  - Remedial Action (45 States);
  - Studies (44 States);
  - CERCLA Match (45 States);
  - O&M (39 States); and
  - Victim Compensation (6 States).

TABLE V-9
USES OF STATE CLEANUP FUNDS

Region	State	Fund	SI	ER	RM	SD	RA	OM	NR	CM	AD	LG	VC
1	CT	Emergency Spill Response Fund	X		X	X	X	X	X	X			
		Urban Site Remedial Action	X		X	X	X	X	X				
	MA	Bond Fund	X	X	X	X	X	X		X			
		Environmental Challenge Fund									X		
	ME	Uncontrolled Sites Bond Account	X	X	X	X	X	X	X	X	X	X	
		Uncontrolled Sites Fund	X	X	X	X	X	X	X	X	X	X	
		Landfill Closure and Remediation Bond Account	X	X	X	X	X	X	X		X	X	
	NH	Bond Fund	X				X						
		Hazardous Waste Cleanup Fund	X	X	X	X	X	X			X	X	
	RI	Environmental Response Fund	X	X	X	X	X	X		X	X		X
	VT	Environmental Contingency Fund	X	X	X	X	X	X	X	X	X	X	
		Petroleum Cleanup Fund	X	X	X	X	X	X	X		X		X
2	NJ	Bond Fund	X	X	X	X	X	X				X	
		Spill Compensation Fund	X	X	X	X	X	X		X	X		X
		Hazardous Discharge Site Cleanup Fund				X					X		
	NY	Hazardous Waste Remedial Fund									X		
		1986 Environmental Quality Bond Act	X	X	X	X	X	X		X	X	X	X
	PR	Environmental Emergencies Fund		X	X	X	X			X	X		
3	DC	None											
	DE	Hazardous Substance Cleanup Fund	X	X	X	X	X	X		X	X		
	MD	Subaccount of Hazardous Substance Control Fund	X	X	X	X	X	X		X	X		
	PA	Hazardous Sites Cleanup Fund	X	X	X	X	X		X	X	X		X
	VA	Virginia Environmental Emergency Response Fund	X	X	X	X	X		X	X			
	WV	Hazardous Waste Emergency Response Fund	X	X	X	X	X	X		X	X		
4	AL	Hazardous Substance Cleanup Fund	X	X	X	X	X	X		X	X		
	FL	Hazardous Waste Management Trust Fund	X	X	X	X	X	X	X	X	X	X	X
		Water Quality Assurance Trust Fund	X	X	X	X	X	X	X	X	X	X	X
	GA	Hazardous Waste Trust Fund	X	X	X	X	X	X		X	X		
	KY	Hazardous Waste Management Fund	X	X	X	X	X	X	X	X	X		
	MS	Pollution Emergency Response Fund	X	X	X	X				X			
	NC	Emergency Response Fund		X									
		Inactive Hazardous Sites Cleanup Fund	X	X	X	X	X						
		Cost Share Trust Fund								X			
	SC	Hazardous Waste Contingency Fund	X	X	X	X	X	X		X			

SI:SITE INVESTIGATION ER:EMERGENCY RESPONSE RM:REMOVALS OM:O&M
SD:STUDIES AND DESIGN RA:REM. ACTIONS NR:NATURAL RESOURCE RESTORATION
CM:CERCLA MATCH AD:PROGRAM ADMIN. LG:GRANTS TO LOCAL GOVT. VC:VICTIM COMP.

TABLE V-9
USES OF STATE CLEANUP FUNDS

Region	State	Fund	SI	ER	RM	SD	RA	OM	NR	CM	AD	LG	VC
4	TN	Hazardous Waste Remedial Action Fund	X	X	X	X	X	X		X	X		
5	IL	Hazardous Waste Fund	X	X	X	X	X	X	X	X	X		
	IN	State Match (Superfund)					X				X		
		Continental Steel Corporation											
		Hazardous Substances Response Trust Fund	X	X	X	X	X	X		X			
	MI	Act 307	X	X	X	X	X	X		X	X		
		Superfund	X										
		Environmental Protection Bond Fund	X	X	X	X	X	X	X	X	X	X	
	MN	Minnesota Environmental Response and Liability Act	X	X	X	X	X	X	X	X	X		
	OH	Hazardous Waste Clean-up Fund	X		X	X	X	X	X		X	X	
		Hazardous Waste Facility Management Fund		X						X			
	WI	Environmental Fund	X	X	X	X	X	X	X	X	X	X	
		Bonding Authority					X			X			
6	AR	Emergency Response Fund	X	X	X			X					
		Hazardous Substance Remedial Action Fund	X	X	X	X	X	X		X	X		
	LA	Hazardous Waste Site Cleanup Fund		X	X	X	X	X					
	NM	State Groundwater Remediation Account									X		
		Potential Responsible Party Program	X		X	X	X						
		Hazardous Waste Emergency Fund		X						X			
	OK	Hazardous Waste Fund		X	X					X			
	TX	Hazardous and Solid Waste Remediation Fee Fund (Fund 550)	X	X	X	X	X	X		X	X		
		Spill Response Fund		X	X								
7	IA	Hazardous Waste Remedial Fund	X	X	X		X	X		X	X		
	KS	Environmental Response Fund	X			X	X				X		
		State Water Plan Fund	X	X	X	X	X	X		X	X		
	MO	Hazardous Waste Remedial Fund	X	X	X	X	X	X		X	X		
	NE	None											
8	CO	Natural Resource Damage Recovery Fund							X				
		Hazardous Substances Response Fund						X		X	X		
	MT	Environmental Quality Protection Fund	X	X	X	X	X	X	X		X		
		Hazardous Waste/CERCLA Special Revenue Account	X				X			X	X		
	ND	Environmental Restoration Fund		X	X		X	X			X		
	SD	The Regulated Substances Response Fund	X	X	X	X	X			X	X		
	UT	Hazardous Substance Mitigation Fund	X	X	X	X		X		X			

SI:SITE INVESTIGATION ER:EMERGENCY RESPONSE RM:REMOVALS OM:O&M
SD:STUDIES AND DESIGN RA:REM. ACTIONS NR:NATURAL RESOURCE RESTORATION
CM:CERCLA MATCH AD:PROGRAM ADMIN. LG:GRANTS TO LOCAL GOVT. VC:VICTIM COMP.

TABLE V-9
USES OF STATE CLEANUP FUNDS

Region	State	Fund	SI	ER	RM	SD	RA	OM	NR	CM	AD	LG	VC
8	WY	Trust and Agency Account Fund		X									
9	AZ	Water Quality Assurance Revolving Fund	X	X	X	X	X	X		X	X	X	
	CA	Hazardous Waste Control Account	X	X	X	X	X	X		X	X		
		Hazardous Substance Cleanup Bond Fund	X	X	X	X	X	X		X		X	
	HI	Environmental Response Revolving Fund	X	X	X	X	X	X	X	X			
	NV	Hazardous Waste Management Fund	X	X	X	X	X	X	X	X			
10	AK	Oil and Hazardous Substance Release Response Fund	X	X	X	X	X			X	X		
	ID	Hazardous Waste Emergency Account		X									
		Hazardous Waste Training, Emergency and Monitoring Account			X		X						
	OR	Orphan Site Account	X		X	X	X	X					
		Hazardous Substance Remedial Action Fund	X	X	X	X	X	X		X	X		
	WA	State Toxic Control Account	X	X	X	X	X	X		X	X		
		Local Toxic Control Account	X	X	X	X	X				X	X	
Count:			58	59	60	56	60	49	21	50	48	15	7

SI:SITE INVESTIGATION ER:EMERGENCY RESPONSE RM:REMOVALS OM:O&M
SD:STUDIES AND DESIGN RA:REM. ACTIONS NR:NATURAL RESOURCE RESTORATION
CM:CERCLA MATCH AD:PROGRAM ADMIN. LG:GRANTS TO LOCAL GOVT. VC:VICTIM COMP.

TABLE V-10

State Cleanup Policies and Criteria

SUMMARY

- 19 States have promulgated standards which may be applied to hazardous cleanup.
- 47 States apply MCLs and/or MCLGs in determining cleanup levels.
- 43 States apply surface water quality criteria.
- 34 States report using EPA Guidelines in determining cleanup levels.
- 40 States reference ambient quality or background levels.
- 42 States reference risk levels or conduct a risk assessment at specific sites.

TABLE V-10
STATE CLEANUP POLICIES AND CRITERIA

Region	State	Promulgated Cleanup Standards	Water Quality Criteria	MCLs or MCLGs	Background Levels	Risk Assessment	EPA Guidelines
1	Connecticut		X	X	X	X	
	Maine		X	X	X	X	
	Massachusetts	X	X	X	X	X	
	New Hampshire		X			X	
	Rhode Island		X	X	X	X	
	Vermont		X	X	X		
2	New Jersey		X	X	X	X	X
	New York		X	X	X	X	X
	Puerto Rico		X	X	X		X
3	Delaware		X	X	X	X	
	District of Columbia						X
	Maryland	X	X	X	X	X	X
	Pennsylvania			X	X		X
	Virginia		X	X	X	X	X
	West Virginia	X	X	X	X	X	X
4	Alabama		X	X	X	X	X
	Florida		X	X	X	X	X
	Georgia		X	X	X		
	Kentucky		X	X	X	X	X
	Mississippi		X	X	X	X	X
	North Carolina		X			X	X
	South Carolina		X	X	X	X	X
	Tennessee			X	X	X	
5	Illinois	X	X	X	X	X	
	Indiana		X	X	X	X	X
	Michigan	X	X	X	X	X	X
	Minnesota	X	X	X		X	X

TABLE V-10
STATE CLEANUP POLICIES AND CRITERIA

Region	State	Promulgated Cleanup Standards	Water Quality Criteria	MCLs or MCLGs	Background Levels	Risk Assessment	EPA Guidelines
5	Ohio		X	X	X	X	X
	Wisconsin	X	X	X	X		
6	Arkansas	X	X	X	X	X	X
	Louisiana		X	X	X	X	X
	New Mexico	X	X	X	X	X	X
	Oklahoma		X	X		X	X
	Texas	X	X	X	X	X	X
7	Iowa	X		X		X	
	Kansas			X	X	X	
	Missouri		X	X		X	X
	Nebraska	X	X	X			
8	Colorado	X	X	X	X	X	X
	Montana		X	X	X	X	X
	North Dakota						
	South Dakota	X	X	X	X		X
	Utah			X		X	X
	Wyoming	X	X	X	X	X	
9	Arizona	X		X	X	X	
	California	X	X	X	X	X	X
	Hawaii		X	X	X	X	X
	Nevada		X	X		X	
10	Alaska		X	X	X	X	X
	Idaho						X
	Oregon	X	X	X	X	X	X
	Washington	X	X	X	X	X	X
Count:		19	43	47	40	42	34

TABLE V-11

State Public Participation Procedures

SUMMARY

- 45 States have public participation procedures; 24 of these States have statutory or regulatory public participation requirements.
- 3 States are preparing statutes or regulations which will address public participation.
- 35 States provide public notice during site handling.
- 23 States solicit public comments.
- 35 States hold or may hold public meetings or hearings.

TABLE V-11
STATE PUBLIC PARTICIPATION REQUIREMENTS

Region	State	Statutory/Regulatory Requirements	Policy/Ad hoc Practices
1	Connecticut	None.	DEP contacts local officials with cleanup workplan and holds public meetings at various stages of investigation and cleanup at State-funded sites.
	Maine	None.	DEP policy is to keep local officials and residents informed.
	Massachusetts	Public notice of Tier 1 sites and applications for Tier 1 response action permits. Public Involvement Plans prepared upon citizen petition. State technical assistance grants and public site inspections available. Local officials informed.	
	New Hampshire	None.	State may hold public hearings in enforcement actions. RPMs informally contact local citizens and officials.
	Rhode Island	None.	
	Vermont	UST regulations require public notice of corrective action. Sites must be entered on town-maintained land records.	Agency meets with town officials, holds public meetings
2	New Jersey	None exist, other than what is required by CERCLA. State is currently preparing amendments to the Technical Rules which will provide for greater participation.	Ongoing use of Site Remediation Program Advisory Group to assist in program refinements and operations. The Advisory Group consists of industrial, banking, realtors, consultants, environmental groups and other stakeholders to the program.
	New York	Site-specific citizen participation program at start of RI/FS includes establishment of local document repository, creation of contact list, and mailing. Upon preparation of Proposed Remedial Action Plan, a mailing, 30-day comment period, and public meeting. When ROD is signed, State summarizes and responds to public comments. Notification by letter to adjacent property owners and town and county clerks when adding or reclassifying site on Registry, and notice, comments and mailing before deletion from Registry.	State Superfund Management Board, which oversees remedial program, includes environmental group and citizen representatives. DEC has 10 full-time citizen participation staff.
	Puerto Rico	None.	
3	Delaware	Public must be notified and given opportunity to comment on proposed consent decrees, settlement revisions, and final remedial action plans.	
	District of Columbia	None.	Notice to persons directly affected.

TABLE V-11
STATE PUBLIC PARTICIPATION REQUIREMENTS

Region	State	Statutory/Regulatory Requirements	Policy/Ad hoc Practices
3	Maryland	None.	MDE practices early community involvement and Superfund program has a staff community relations coordinator
	Pennsylvania	Analysis of Response action and alternatives in Public Notice followed by 90 day Public Comment period. Public hearing within 90 day comment period.	
	Virginia	None.	Federal regulations are followed. State implements additional public outreach activities.
	West Virginia	None.	
4	Alabama	30-day comment period on cleanup plan. Single publication of notice in county paper. Hearing required prior to issuing administrative order unless imminent threat to human health.	Uses news releases and proactive involvement of the media for time critical events.
	Florida	None.	Involvement varies on a site-specific basis. May include door to door outreach and/or meetings.
	Georgia	None yet, state plans to establish.	None yet, state plans to establish.
	Kentucky	None.	There is a Public Information Repository for NPL and State priority list sites. It is generally standard practice to hold Public Meetings for these sites.
	Mississippi	None.	Policies require public comment period, direct mailings, and public meetings during remediation process. Local governments and governor notified when emergency order issued.
	North Carolina	3 weeks in newspaper, 45-day comment period, with public meeting at Secretary's discretion, notice to those requesting to be on mailing list, copy filed with Register of Deeds, copies placed in local libraries and County Health Director's Office.	
	South Carolina	None.	State follows NCP public participation requirements.
	Tennessee	Public meeting required at end of RI/FS stage for input in development of ROD. Rulemaking hearings (with required public participation) must be held prior to site(s) being added and/or deleted from State list.	

TABLE V-11
STATE PUBLIC PARTICIPATION REQUIREMENTS

Region	State	Statutory/Regulatory Requirements	Policy/Ad hoc Practices
5	Illinois	NCP rules on public participation apply, with the additional requirement that the required public meeting must be a formal Public Hearing.	Community Relations Coordinators are assigned for qualifying sites. Coordinators emphasize direct contact in small groups or one-to-one.
	Indiana	None.	On state funded cleanups, state follows CERCLA public participation guidance.
	Michigan	Public hearing when State list updated. New rules provide public hearing during remedy selection process. System modeled on CERCLA.	
	Minnesota	All enforcement actions and funding actions are approved by Agency Citizen's Board.	State assigns a public information officer to each site, holds public meetings in affected community after RI/FS to present the proposed plan for remedial action. State's practice is to meet with the public in their homes or other local setting, with an emphasis on personal communication.
	Ohio	Statute under review.	Ohio EPA/DERR policy on preferred plans and Decision Documents (state equivalent to proposed plan and ROD) require public comment period, responsiveness summary, public meeting, and establishment of an information repository.
	Wisconsin	State list is subject to public notice, 30-day comment period and hearing requirements. Remedial actions are subject to public notice, and a public hearing if requested, within 30 days. There have been no formal challenges by the public to State-funded RAs. All files open to public with limited confidentiality and enforcement exception.	Strongly encourage public participation in cleanup decisions even when not required.
6	Arkansas	Transcripts of public hearings and comments received on the site listing become part of the administrative record.	A public hearing is held prior to decisions to add or delete a site from the priority list. Public meetings and/or fact sheets are provided prior to major milestones or cleanup projects.
	Louisiana	General requirement providing an opportunity for public meeting and, if requested, a public comment period prior to the approval of RI plan and selection of remedy (R.S. 30:2280).	Public comment period required for closure plans when DEQ proposes to treat, store, or dispose of hazardous wastes at abandoned sites. At complex sites, DEQ institutes community relations programs including regular public meetings. Prior to concluding settlement agreements, DEQ makes them available to the public and holds public meetings.

TABLE V-11
STATE PUBLIC PARTICIPATION REQUIREMENTS

Region	State	Statutory/Regulatory Requirements	Policy/Ad hoc Practices
6	New Mexico	Water Quality Control Commission regulations for non-NPL sites. NCP regulations for NPL sites.	Major cases: fact sheet published, periodic public meetings, public notice of selected remedy. Small cases: by demand.
	Oklahoma	None.	
	Texas	Statute requires public notice and comment on site listing and remedy selection.	TNRCC meets informally with community as community interest warrants.
7	Iowa	Must provide technical advice and assistance to political subdivisions and to other persons upon request.	None.
	Kansas	None.	State follows NCP public participation requirements. State is developing a contingency plan which will include guidelines on community participation.
	Missouri	The Missouri Hazardous Waste Management Law provides appeals through the Hazardous Waste Management Commission which may convene a public hearing if resolution of appeals cannot be negotiated.	Public meetings, availability sessions, fact sheets, and news releases are commonly used to provide information to the public and to solicit input from the public for decision making.
	Nebraska	For groundwater contamination, Title 118 requires RPs to submit proposal based on "detailed site assessment." Public notice of the proposal is given by newspaper and radio, with copies available in public libraries. A 30-day comment period and any requested hearings run prior to final review.	
8	Colorado	None.	State currently makes increasing use of technical and non-technical advisory groups for input on decisions and future land use.
	Montana	CECRA requires public notice of administrative orders and consent decrees. Amendments require notice to local governing bodies and city commissioners and, at their request, a public meeting must be held.	Agency typically allows for more public participation than is required by CECRA.
	North Dakota	None.	The Division notifies local authorities with information about the site. Local communities can become involved in site activities.
	South Dakota	None.	Public notices and public meetings at major milestones and upon request.

TABLE V-11
STATE PUBLIC PARTICIPATION REQUIREMENTS

Region	State	Statutory/Regulatory Requirements	Policy/Ad hoc Practices
8	Utah	None.	State follows NCP's public participation requirements and, on site-specific basis, DEQ involves the public in cleanup process. Strong public participation by PRPs and on a site-specific basis.
	Wyoming	None.	Public participation is informal and includes opportunity to review documents and comment on rulemakings and permitting decisions. Citizen commissions at some NPL sites.
9	Arizona	30 day public comment period, meetings or hearings are discretionary but state always does one or both at site listing and remedy selection stage	Annual newsletters for sites where the public has expressed an interest
	California	Dept. must hold at least one public meeting before adopting an RA plan and must review and consider public comments. Anyone affected by a removal or remedial action must have opportunity to participate in Dept's decision making process. Dept. must develop and make available to public a schedule of activities for each site.	
	Hawaii	Public participation will be defined in administrative rules. They will include establishing an Administrative Record, publishing notice of availability of Admin. Rec. in newspaper, and soliciting public comments on proposed action. Department of Health required to develop public education program for hazardous waste issues.	Current policy is to conduct public participation activities on ad-hoc basis.
	Nevada	None.	Draft policy of 9/20/93 addresses public notification, public hearing, public records, advisory groups, and appeal procedures.
10	Alaska	None.	Attempt to involve public depending upon seriousness of site and/or public interest. Range from door to door contact and letters to public meetings.
	Idaho	None.	
	Oregon	Public notice of DEQ's program for identifying releases, proposed settlement agreements, 30-day comment period for all proposed remedial actions. Public meetings for proposed remedial actions if requested by a minimum of 10 people. Public notice provided for final remedial action.	

TABLE V-11
STATE PUBLIC PARTICIPATION REQUIREMENTS

Region	State	Statutory/Regulatory Requirements	Policy/Ad hoc Practices
10	Washington	Early planning and development of a site-specific public participation plan, public notices; a site register (bi-weekly) department publication on status of sites; public meetings or hearings; and the participation of regional citizen advisory committees.	

TABLE V-12

Liability Standards

SUMMARY

Culpability Standards

- 40 States have strict liability standards.
- 5 States have a liability standard other than strict.
- 7 States do not specify whether liability is strict or not.

Allocation Standards

- 32 States have strict, joint and several liability; 6 of these expressly permit apportionment.
- 2 States have joint and several, but not strict, liability.
- 4 States have proportional liability.
- 14 States do not specify either joint and several or proportional liability.

TABLE V-12
LIABILITY STANDARDS

Region	State	Strict	Joint and Several	Proportional	Other	Not Specified
1	Connecticut	X	X			
	Maine	X	X			
	Massachusetts	X	X			
	New Hampshire	X	X			
	Rhode Island	X	X			
	Vermont	X	X	X		
2	New Jersey	X	X			
	New York	X	X			
	Puerto Rico	X				
3	Delaware	X	X			
	District of Columbia					X
	Maryland	X	X	X		
	Pennsylvania	X	X			
	Virginia				X	
	West Virginia					X
4	Alabama			X		
	Florida	X	X			
	Georgia	X	X			
	Kentucky	X	X			
	Mississippi	X	X			
	North Carolina	X	X			
	South Carolina	X	X			
	Tennessee			X		
5	Illinois	X	X			
	Indiana	X	X			
	Michigan	X	X			
	Minnesota	X	X			
	Ohio					X

TABLE V-12
LIABILITY STANDARDS

Region	State	Strict	Joint and Several	Proportional	Other	Not Specified
5	Wisconsin	X	X		X	
6	Arkansas	X	X	X		
	Louisiana	X	X	X		
	New Mexico		X			
	Oklahoma					X
	Texas	X	X	X		
7	Iowa	X	X			
	Kansas	X				
	Missouri	X				
	Nebraska	X				
8	Colorado					X
	Montana	X	X	X		
	North Dakota					X
	South Dakota	X				
	Utah	X		X		
	Wyoming		X			
9	Arizona	X	X			
	California	X		X		
	Hawaii	X	X			
	Nevada	X				
10	Alaska	X	X			
	Idaho					X
	Oregon	X	X			
	Washington	X	X			

TABLE V-13

Penalties and Damages Available Under State "Superfund" Statute

SUMMARY

- 25 States provide for punitive damages, compared with 24 in 1991, 23 in 1990, and 22 in 1989.
    - 22 States authorize treble damages.
    - 1 State authorizes double damages.
    - 2 States authorize one and one-half damages.
- 45 States authorize civil penalties (plus West Virginia - only for failing to pay fees). No additional States have added penalties since the 1991 update.

TABLE V-13
PENALTIES AND DAMAGES AVAILABLE UNDER STATE "SUPERFUND" STATUTE

Region	State	Punitive Damages	Civil Penalties
1	Connecticut	1 1/2 x State's cost	$25,000/day
	Maine	Treble	None
	Massachusetts	Treble	$25,000/day; $100,000/day for failure to notify of a release
	New Hampshire	None	None
	Rhode Island	Treble	Up to $25,000/day
	Vermont	Treble	$10,000/day
2	New Jersey	Treble	$50,000/day per violation
	New York	None	$25,000/day
	Puerto Rico	None	$25,000/day
3	Delaware	Treble	$10,000/day for violating an order
	District of Columbia	None	up to $25,000/day per violation
	Maryland	None	$25,000/violation
	Pennsylvania	Treble	$25,000/day (min. $5,000/day)
	Virginia	None	Up to $25,000/day per violation of an order
	West Virginia	None	None
4	Alabama	None	$25,000 per violation per day to a $250,000 max assessed in administrative order
	Florida	None	Up to $25,000/day
	Georgia	Treble	$50,000/day
	Kentucky	None	$25,000/day
	Mississippi	None	Up to $25,000/violation; cost of removal/remediation; cost of restarting/replenishing killed fish or game.
	North Carolina	None	$10,000/day for haz. waste violation
	South Carolina	Treble	$25,000/day with stipulated penalties for non-compliance with a consent agreement of $1,000/day
	Tennessee	1 1/2 times	Up to $10,000/day
5	Illinois	Treble	$50,000/day for the first day of violation and $10,000/day for continuing violation

TABLE V-13
PENALTIES AND DAMAGES AVAILABLE UNDER STATE "SUPERFUND" STATUTE

Region	State	Punitive Damages	Civil Penalties
5	Indiana	Treble	$25,000/day/violation
	Michigan	Treble	$1,000/day for failure to comply with admin. request to undertake a response activity; $25,000/day for viol. of judicial order
	Minnesota	None.	$20,000/day if responsible person fails to take response actions or does not make reasonable progress in completing response action.
	Ohio	None	$10,000/day per violation
	Wisconsin	None	Up to $5,000/day
6	Arkansas	Treble	$25,000/day
	Louisiana	Treble; double damages from non-participating PRPs to participating PRPs	$25,000/day for failure to provide information
	New Mexico	None	$15,000/day for discharge permit violations; $10,000/day for other violations; $25,000/day for violations of compliance orders
	Oklahoma	None	None
	Texas	Treble	$25,000
7	Iowa	Treble	Up to $1,000/day for failure to notify; up to $10,000/day for air and water violations.
	Kansas	None	Hazardous waste $10,000-25,000; water pollution $10,000; solid waste $5,000
	Missouri	Treble	Violations of property transfer or change of use may be subject to penalty not to exceed $1000/day for each day of violation.
	Nebraska	None	None
8	Colorado	None	None
	Montana	Double	$10,000/day for violation or failure to comply; $1000/day adminstrative penalties
	North Dakota	None	None specific to Superfund
	South Dakota	None	$10,000/day/incident
	Utah	None	$10,000/day for violation of department orders

TABLE V-13
PENALTIES AND DAMAGES AVAILABLE UNDER STATE "SUPERFUND" STATUTE

Region	State	Punitive Damages	Civil Penalties
8	Wyoming	None	$10,000/day for EQA violations; $25,000/day for willful and knowing violations
9	Arizona	Treble	$5,000/day for failure to comply; $10,000/day for failure to report release; CERCLA consent orders up to $25,000/day
	California	Treble	Up to $25,000/day for violating an order/agreement
	Hawaii	Treble	$10,000/day for failure to report a release; at least $50,000/violation per day of continuance for failure to comply with enforcement order
	Nevada	None	$25,000/day per violation
10	Alaska	None	$500-$100,000 for first violations, no more than $10,000/day of continued violation
	Idaho	None	$10,000/day
	Oregon	Treble	Up to $10,000/day/violation
	Washington	Treble	Up to $25,000/day

TABLE V-14

Natural Resource Damages Programs

SUMMARY

- 25 States report they have natural resource damages (NRD) programs.
- Of the States that do not have formal NRD programs, 5 have the authority to recover damages to natural resources and 8 are able to use monies from their State funds for natural resource damage assessments or restoration.
- California could not provide a total amount of money recovered, but reports that the total for just three major NRD recoveries by the CA Department of Fish and Game came to $23,855,533.
- 14 States report recovering more than $126,944,372 in natural resorce damage claims.
- There are 69 NRD claims pending in 14 of the States that report that they have NRD programs.
- 6 States reported more than $514,500,000 in pending NRD claims.

TABLE V-14
NATURAL RESOURCE DAMAGES PROGRAMS

Region	State	Program	Date	Amount Recovered	Claims Pending	Amount Pending
1	Connecticut	no				
	Maine	yes	1991	$1,000,000	3	
	Massachusetts	yes	1983	$19,000,000	0	$0
	New Hampshire	no				
	Rhode Island	no				
	Vermont	no				
2	New Jersey	yes	7/1/93	$5,000,000	8	
	New York	yes	1990	$20,000,000		
	Puerto Rico	no				
3	Delaware	yes	1993	$600,000	0	$0
	District of Columbia	no				
	Maryland	yes	1982	$0	0	$0
	Pennsylvania	no				
	Virginia	no				
	West Virginia	no				
4	Alabama	yes	1988	$0	0	$0
	Florida	no				
	Georgia	no				
	Kentucky	no				
	Mississippi	yes	1972	$500,000	0	$0
	North Carolina	no				
	South Carolina	no				
	Tennessee	yes	1980	$0	0	$0
5	Illinois	yes	1993	$0	4	
	Indiana	yes	1988	$2,700,000	5	$2,500,000
	Michigan	yes	1990	$3,840,000		
	Minnesota	no				
	Ohio	yes	1990	$200,000	0	$0

TABLE V-14
NATURAL RESOURCE DAMAGES PROGRAMS

Region	State	Program	Date	Amount Recovered	Claims Pending	Amount Pending
5	Wisconsin	no				
6	Arkansas	yes	11/93	$0	1	
	Louisiana	no				
	New Mexico	yes	7/93	$0	1	$0
	Oklahoma	no				
	Texas	yes	4/90	$248,839	26	$50,000,000
7	Iowa	no				
	Kansas	yes	mid-1970s		1	
	Missouri	no				
	Nebraska	no				
8	Colorado	yes	1987	$5,000,000	2	
	Montana	yes	1991	$0	1	$300,000,000
	North Dakota	no				
	South Dakota	no				
	Utah	no			1	$12,000,000
	Wyoming	no				
9	Arizona	yes	1991	$0	0	$0
	California	yes	1960s	$23,855,533+	12	$100,000,000
	Hawaii	yes	1990	$0	0	$0
	Nevada	no				
10	Alaska	no				
	Idaho	yes	1985	$5,000,000	1	
	Oregon	yes	1989	$0	1	
	Washington	yes	1990	$40,000,000	3	$50,000,000
Total:				$103,088,839	70	$514,500,000

TABLE V-15

Property Transfer Provisions

SUMMARY

- 7 States have superlien provisions.
- 23 States have property transfer provisions, up from 18 in 1991.
    - 16 States have deed recordation provisions for hazardous substance sites.
    - 16 States require disclosure by sellers to purchasers.
    - 2 States require cleanup as a condition of transfer of property.
- 15 States maintain databases to assist purchasers and other parties to transactions to perform environmental due diligence.

TABLE V-15
PROPERTY TRANSFER PROVISIONS

Region	State	No Law	Super Lien	Record on Deed	Disclose before Transfer	Examine before Transfer	Cleanup before Transfer	Data base
1	Connecticut		X		X	X	X	X
	Maine		X		X			X
	Massachusetts		X					X
	New Hampshire		X					
	Rhode Island			X				X
	Vermont	X						
2	New Jersey		X		X	X	X	
	New York			X				X
	Puerto Rico	X						
3	Delaware			X				X
	District of Columbia	X						
	Maryland	X						
	Pennsylvania			X	X			
	Virginia	X						
	West Virginia			X	X			
4	Alabama	X						
	Florida	X						
	Georgia			X	X			X
	Kentucky	X						
	Mississippi				X			
	North Carolina			X				
	South Carolina			X				
	Tennessee			X				X
5	Illinois			X	X			
	Indiana				X	X		
	Michigan			X	X			X
	Minnesota			X	X			

TABLE V-15
PROPERTY TRANSFER PROVISIONS

Region	State	No Law	Super Lien	Record on Deed	Disclose before Transfer	Examine before Transfer	Cleanup before Transfer	Data base
5	Ohio	X						
	Wisconsin	X						
6	Arkansas		X					
	Louisiana		X	X	X	X		X
	New Mexico	X						
	Oklahoma	X						
	Texas				X			
7	Iowa			X	X			X
	Kansas	X						
	Missouri			X	X			X
	Nebraska	X						
8	Colorado	X						
	Montana	X						
	North Dakota	X						
	South Dakota	X						
	Utah	X						
	Wyoming			X				
9	Arizona	X						
	California				X			
	Hawaii	X						
	Nevada	X						
10	Alaska	X						X
	Idaho	X						
	Oregon	X						X
	Washington	X						X
Count:		26	7	16	16	4	2	15

TABLE V-16

Federal-State Partnerships

SUMMARY

- 48 States had Site-Specific agreements (more than doubling the 1991 total of 22).
- 48 States had Core Program agreements (a slight increase from the 1991 total of 45).
- 18 States had Superfund Memoranda of Agreement (the same number as in 1991.)
- None of the States in Regions I, II, or IX had a Superfund Memorandum of Agreement.

TABLE V-16
FEDERAL-STATE PARTNERSHIPS

Region	State	Site-Specific	CORE	SMOA
1	Connecticut	X	X	
	Maine	X	X	
	Massachusetts	X	X	
	New Hampshire	X	X	
	Rhode Island	X	X	
	Vermont	X	X	
2	New Jersey	X	X	
	New York	X	X	
	Puerto Rico	X	X	
3	Delaware	X	X	X
	District of Columbia			
	Maryland	X	X	
	Pennsylvania		X	
	Virginia	X	X	X
	West Virginia	X	X	
4	Alabama	X	X	X
	Florida	X		
	Georgia	X	X	
	Kentucky	X	X	
	Mississippi	X	X	X
	North Carolina		X	
	South Carolina	X	X	X
	Tennessee	X	X	
5	Illinois	X	X	X
	Indiana	X	X	X
	Michigan	X	X	X
	Minnesota	X	X	X
	Ohio	X	X	X

TABLE V-16
FEDERAL-STATE PARTNERSHIPS

Region	State	Site-Specific	CORE	SMOA
5	Wisconsin	X	X	
6	Arkansas	X	X	
	Louisiana	X	X	X
	New Mexico	X	X	X
	Oklahoma	X	X	
	Texas	X	X	X
7	Iowa	X	X	
	Kansas	X	X	
	Missouri	X	X	X
	Nebraska	X	X	
8	Colorado	X	X	X
	Montana	X	X	
	North Dakota			
	South Dakota	X	X	
	Utah	X	X	X
	Wyoming	X		
9	Arizona	X	X	
	California	X	X	
	Hawaii	X	X	
	Nevada	X	X	
10	Alaska	X	X	
	Idaho	X	X	
	Oregon	X	X	X
	Washington	X	X	X

TABLE V-17

Voluntary Remediation Programs: Key Administrative Procedures

SUMMARY

- 12 States have Department oversight.
- 1 State has third party oversight.
- 15 States have Department sign-off.
- 3 States have enforceable consent agreements.

TABLE V-17
VOLUNTARY REMEDIATION PROGRAMS:
KEY ADMINISTRATIVE PROCEDURES

Region	Program	Department Oversight	Third Party Oversight	Department Sign-Off	Enforceable Consent Agreement
1	Maine	X		X	
	Massachusetts		X		
2	New Jersey	X		X	
3	Delaware	X		X	
	Virginia	X		X	
4	North Carolina (Consent Agreement Program)	X		X	X
	North Carolina (Independent Action Program)			X	
5	Illinois	X		X	
	Indiana	X		X	
	Minnesota	X		X	
	Wisconsin			X	
7	Missouri	X		X	
8	Utah	X		X	X
10	Oregon	X		X	
	Washington (Consent Agreement Program)	X		X	X
	Washington (Independent Action Program)			X	

TABLE V-18

Voluntary Remediation Programs: Authorities and Agreements

SUMMARY

- 7 States have specific statutory authority for their voluntary remediation programs with procedures outlined in the statute.
- 7 States have established programs under the general authority of State Cleanup or Environmental Protection Acts.

TABLE V-18
VOLUNTARY REMEDIATION PROGRAMS: AUTHORITIES AND AGREEMENTS

Region	Program	Authority	Initial Agreement	Sign-off Procedures
1	Maine	P.L. 1993, Ch. 355	Party requests Department oversight to show that property has or has not been the site of a release or threatened release of a hazardous substance, pollutant or contaminant. Department will not give oversight until site accepted.	At completion of work all parties completing cleanup action eligible for Certificates of Completion. Certificates provide that Department will never initiate enforcement action against party for known release.
	Massachusetts	Amendments to Chapter 21E of Massachusetts General Law (Chapter 133 of the Acts of 1992).	Party notifies DEP that site is contaminated, then has one year to classify site with respect to risk level. Site is labeled a Tier I Category A, B, or C site or a Tier II site. If site is a serious risk to public health and environment, it is a Tier I Category A site and gets direct DEP oversight and cleanup enforcement. All other site classes, cleanup under "voluntary" procedures.	For Tier I Category A sites, DEP oversees and enforces cleanup and files Completion Statement. For all other sites, licensed consultant determines that site is clean and files a Completion Statement with DEP. DEP does not review or sign-off on land.
2	New Jersey	N.J.A.C. 7:26C. Technical guidance under N.J.A.C. 7:26E.	Party submits written application to DEPE. If site accepted, an MOA, which outlines process to be used to obtain DEPE sign-off, must be signed.	DEPE approves work. Party may receive a No Further Action Letter.
3	Delaware	Delaware Hazardous Substance Cleanup Act, 7 Del. Code. Chapter 91	Party must enter into an unenforceable Consent Decree filed in court. Agreement identifies cleanup procedures and oversight costs to receive Departmental sign-off. Similar to enforced Consent Decree, except it allows termination at any point and has no penalties provision.	Department approves work with a Certificate of Completion of Remedy which has effect of a No Further Action Letter.
	Virginia	General authority under Virginia Waste Management Act, Art. 1, Ch. 14, Tit. 10.1. Solid Waste Management Regulations (Amend. 1) and Hazardous Waste Regulations (Amend. 12) provide procedural authority.	Party submits a request to clean up site. If Hazardous Waste and State Superfund programs determine they will not clean the site, a Consent Agreement is signed. A No Further Action Letter will be given by the Department if the party completes cleanup under the Agreement. Consent Agreement is not binding.	No Further Action Letter is provided at sign-off in accordance with the Consent Agreement.

TABLE V-18
VOLUNTARY REMEDIATION PROGRAMS: AUTHORITIES AND AGREEMENTS

Region	Program	Authority	Initial Agreement	Sign-off Procedures
4	North Carolina (Consent Agreement Program)	Specific authority in N.C.G.S. §130A-130.9	Party must notify Department in writing of its intent. Department and party sign Administrative Order on Consent, which outlines work to be performed. AOC must be signed before Departmental review of documents and preparation of Remedial Action Plan.	Report of implementation and completion of Remedial Action Plan must be submitted to Department. After approval of report, Department sends No Further Action Letter to party indicating satisfaction of terms of AOC.
	North Carolina (Independent Action Program)	Specific authority in N.C.G.S. §130A-130.9	Party must notify Department of contamination. If party submits work schedule, Department will not report site to federal Superfund branch.	After remedial action, party must submit site data and documents for Department review. If Department determines satisfactory assessment and remedial action conducted, site given No Further Action status.
5	Illinois	General authority under the Environmental Protection Act Section 22.2(m) and Part 659 of 35 Illinois Administrative Code.	Site owner or operator must provide project documents for review and request IEPA's review and evaluation services in writing. IEPA determines if site is eligible for Program. Site enrolled in program when person requesting IEPA's services signs agreement and provides partial pre-payment of IEPA administrative costs.	Upon successful completion of preventive or corrective action at site, IEPA provides a release from responsibility for further activities pursuant to Sec. 4(y) of Illinois Environmental Protection Act.
	Indiana	Indiana Code 13-7-8.9	Party submits an application form. If site is accepted into program, a Voluntary Remediation Agreement (VRA) is signed. VRA includes; 1) itemized list of estimated costs for DEM oversight, 2) dispute resolution provisions, 3) provisions for indemnity for parties, 4) record retention provisions, 5) timetable for DEM review, and 6) provisions for interagency coordination.	Party receives Certificate of Completion from DEM. Governor provides party with Covenant Not to Sue for liability or claims resulting from release that was subject of plan.

TABLE V-18
VOLUNTARY REMEDIATION PROGRAMS: AUTHORITIES AND AGREEMENTS

Region	Program	Authority	Initial Agreement	Sign-off Procedures
5	Minnesota	Specific authority under Minnesota Environmental Response and Liability Act (MERLA 115B.17 Sub.14)	Party requests Agency oversight to show that property has or has not been site of a release or threatened release of a hazardous substance, pollutant or contaminant. Agency will not provide oversight until application filed and site accepted.	At completion of work, all parties completing cleanup actions are eligible for Certificates of Completion. For non-responsible parties, Certificates provide no future enforcement action against party. RP Certificates provide no future enforcement action against lenders and successors.
	Wisconsin	Environmental Repair Statute, Wisc. Stat. §144.442 Hazardous Substance Spill Statute, Wisc. Stat. §144.76.	Before remediation, Department issues Responsible Party Letter which stipulates liable parties. If site is low priority, party may undertake cleanup under voluntary program. If high priority, enforceable agreement must be signed and party cannot remediate in accordance with voluntary remediation program.	If Department approves final report, Close-Out Letter given. Letter provides no further action at site, if information available to Department is complete and there are no new developments.
7	Missouri	Specific statutory authority under enacted S.B. 80 (awaiting enactment number)	Application to remediate site is submitted to DNR. Application must include; 1) location of real property, 2) description of nature of operations, activities and dates leading to contamination, 3) description of nature and extent of contamination at site, and 4) past and present owners of site.	Sign-off only if; 1) criteria in agreement with DNR and plan are met, and 2) party has remitted all applicable fees. After criteria are met, DNR issues No Further Action Letter. DNR reserves right to require party to conduct additional environmental assessments or remedial actions if future monitoring identifies additional contamination.
8	Utah	Rule 315-9 of the Spill Response Rules of the Utah Hazardous Waste Management Rules	Party must enter into enforceable Consent Agreement, which provides for oversight costs and outlines procedure to be undertaken.	Party receives letter indicating they have completed the 3 phases of cleanup. Letter has no legal significance.
10	Oregon	Environmental Cleanup Rules OAR 340-122-101	Party requests oversight by DEQ for investigation and cleanup activities at site. Letter Agreement between DEQ and party to clean site under program is signed.	Party must prepare follow-up report. DEQ reviews and comments on report. Necessary revisions are made. DEQ prepares No Further Action Letter.

TABLE V-18
VOLUNTARY REMEDIATION PROGRAMS: AUTHORITIES AND AGREEMENTS

Region	Program	Authority	Initial Agreement	Sign-off Procedures
10	Washington (Consent Agreement Program)	General authority under Model Toxics Control Act, Ch. 70.105D RCW	Party requests Department oversight for cleanup and enters into a Memorandum of Understanding (MOU). MOU addresses all phases of work and provides cost and prepayment estimates. MOU preliminary to enforceable Consent Decree or Agreed Order for cleanup.	Consent Decree contains sign-off terms. No Further Action Letter usually given.
	Washington (Independent Action Program)	General authority under Model Toxics Control Act, Ch.70.105D RCW	No Department involvement until remedial action completed. Department can provide informal technical assistance with requirements of Model Toxics Control Act.	When report approved, Department removes site from hazardous site list and may issue No Further Action Letter.

TABLE V-19

State Oversight of Voluntary Remediation Activities

SUMMARY

- 14 States have voluntary remediation programs.
- 9 States have a voluntary remediation division or program office.
- 5 States' Environmental departments are responsible for private party cleanups.

TABLE V-19
STATE OVERSIGHT OF VOLUNTARY REMEDIATION ACTIVITIES

Region	Program	Agency	Workplans and Department Approval	Oversight Costs and Schedules
1	Maine	Department of Environmental Protection	Investigation work plan must be approved by Department. Parties receive oversight for investigation. Cleanup levels determined on site-by-site basis. Party submits Voluntary Response Action Plan (VRAP), including investigation report and response action. Feasibility study not required. Instead, party chooses cleanup technology, which must meet USEPA criteria. Department approves VRAP if meets standards for non-voluntary cleanups.	Department provides technical assistance, review and approval of work plans and reports. Party pays initial non-refundable fee to enter program. Thereafter DEP assesses hourly rate up to $50/hour/person.
	Massachusetts	Department of Environmental Protection, Bureau of Waste Site Cleanup	Only Tier I Category A Sites need DEP approval of work plans. Tier I Category B or C sites must use DEP-licensed consultants to clean site and must get permits. Tier II sites must use licensed consultants, but do not need permits. DEP will audit set percentage of cleanups to ensure reliability of consultant.	Party pays cost of cleanup, but no oversight charge to DEP. RPs must clean sites to DEP standards within 5 years of notification. Non-responsible parties have no time limits.
2	New Jersey	Department of Environmental Protection and Energy, Division of Responsible Party Site Remediation	Process is identical to an enforced action. Party must submit an investigation of the contamination which must be approved by DEPE. DEPE then chooses a remedy identified in the remediation plan.	Party pays cost of cleanup and hourly oversight charge to DEPE, but no initial deposit. There are no time limits. If party is too slow, it will be eliminated from the program. A party may terminate at any point.
3	Delaware	Department of Natural Resources and Environmental Control, Superfund Program	Mirrors CERCLA enforced actions procedure with DNR approval of investigation work plan, risk assessment and remediation work plan. Not all remedies must be analyzed; party demonstrates feasibility of selected remedy.	DNR provides technical assistance, review and approval of work plans and reports. Party pays hourly oversight charge and all cleanup costs. Deposit requirements are included in Consent Decree. No time limits. Party may be eliminated from program if Department deems insufficient progress. Party may terminate at any point.

TABLE V-19
STATE OVERSIGHT OF
VOLUNTARY REMEDIATION ACTIVITIES

Region	Program	Agency	Workplans and Department Approval	Oversight Costs and Schedules
3	Virginia	Department of Environmental Quality, Waste Division, Office of Environmental Response and Remediation, Voluntary Cleanup Program	DEQ reviews work plans but does not approve plans. Risk assessments reviewed if part of plan. DEQ solicits comment from appropriate program office and provides guidance to party. No set procedure or requirements for work plans.	No charge for DEQ oversight. No time limits. Party may terminate at any point.
4	North Carolina (Consent Agreement Program)	Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Superfund Section, Inactive Hazardous Sites Program	Party prepares Remedial Investigation Work Plan, according to USEPA Engineering Support Branch Standards Operating Procedures Manual, in 2 phases. Department issues cleanup goals after first phase and notifies party when investigation is complete. Party prepares Remedial Action Plan including objectives, alternatives, and health and safety plan. Plan approved by DEHNR after public comment period.	Department provides technical assistance, review and approval of work plans and reports. No charge for oversight. Time schedules stipulated in Adminstrative Order on Consent (AOC).
	North Carolina (Independent Action Program)	Department of Environment, Health and Natural Resources, Division of Solid Waste Management, Superfund Section, Inactive Hazardous Sites Program	Investigation and workplans not required because there is no Department oversight. After cleanup, party must submit report.	Department reviews final cleanup report. No charge for review. No time limits.
5	Illinois	Illinois Environmental Protection Agency	Parties submit an investigation workplan which must be generated in accordance with IEPA requirements. IEPA establishes cleanup objectives to protect human health, the environment, and State groundwater quality. Objectives must be achieved before IEPA will consider remediation complete. Party must prepare work plan with: a) executive summary; b) statement of objective; c) action plan; d) quality assurance plan; e) health and safety; and f) schedule.	Party requesting review and evaluation services must pay all costs of investigation and cleanup and possibly reimburse IEPA for State costs. Entry into Program requires partial payment of IEPA administrative costs in a variable amount from $200 to $5,000. No time limit unless entry into Program accepted as an alternative to anticipated enforcement action.

TABLE V-19
STATE OVERSIGHT OF
VOLUNTARY REMEDIATION ACTIVITIES

Region	Program	Agency	Workplans and Department Approval	Oversight Costs and Schedules
5	Indiana	Department of Environmental Management, Voluntary Cleanup Program	Work plan must include; 1) documentation of investigation, 2) proposed remedial action, 3) quality assurance plan that meets DEM guidelines for implementation of sampling and analysis, health and safety, community relations, data management, and record-keeping, and 4) a proposed schedule for implementation of all tasks. No feasibility study is required. DEM will approve a cleanup technology if party can show basis that technology	DEM provides technical assistance, review and approval of work plans and reports. Party pays hourly oversight charge. $1000 application fee is applied against oversight costs. Any remainder of fee is refundable if site is rejected from program. DEM may eliminate party from program if time schedules stated in the Voluntary Remediation Agreement (VRA) are not met. Party may terminate at any time.
	Minnesota	Pollution Control Agency, Voluntary Investigation and Cleanup Unit	Parties receive Agency approval and oversight for site investigation. Cleanup levels determined site-by-site during or after investigation. Party must submit Voluntary Response Action Plan (VRAP), including investigation report and response action. No feasibility study; party chooses cleanup technology and Agency approves. VRAP must meet the same standards that apply to non-voluntary response actions.	Party pays hourly oversight charge for Agency's technical assistance, review and approval of work plans and reports. Ninety days of inactivity terminates a party's participation in the program. No other time limits. Party may terminate at any time.
	Wisconsin	Department of Natural Resources, Energy and Remedial Response Program	Party can use any investigation and cleanup techniques. Department not involved until final report submitted.	No Department oversight. No charges. No time limits.
7	Missouri	Department of Natural Resources	Party must submit all site reports, investigations, sample collections and sample analyses, including a Phase I site assessment. If DNR determines that remediation is required, party must submit Work Plan which includes remediation techniques, safety plans, testing protocols and monitoring plans. DNR has 90 days to review and approve plan if it satisfies remediation criteria.	Party must provide $5K deposit before submitting Plan and $200 application fee. DNR reimbursed for administration and oversight costs. DNR bills parties conducting cleanup at rate established by Hazardous Waste Commission. DNR must refund unused monies. Schedule included in Plan. Party may terminate participation at any time after providing written notice.

TABLE V-19
STATE OVERSIGHT OF
VOLUNTARY REMEDIATION ACTIVITIES

Region	Program	Agency	Workplans and Department Approval	Oversight Costs and Schedules
8	Utah	Department of Environmental Quality, Division of Solid and Hazardous Waste, Compliance and Permitting	Party submits Phase I investigation plan for DEQ guidance and approval. Party submits Phase II investigation report, which identifies source and extent of contamination and proposes remediation or no action, to DEQ for approval. Report also needs DEQ approval. Party submits Phase III site cleaning plan. DEQ approves plan if party shows that the remediation technology (which party may choose) will be effective.	Party pays costs of cleanup and hourly oversight charge to DEQ. No deposit required. Party must meet schedule stipulated in Consent Agreement. If time schedule is not followed, DEQ may eliminate site from program or enforce the cleanup. Party may not terminate the Agreement.
10	Oregon	Department of Environmental Quality, Environmental Cleanup Division, Voluntary Cleanup Section	Party prepares investigative workplan, which defines nature and extent of contamination, for DEQ evaluation. Party implements investigative plan with DEQ oversight. Formal investigative processes are required for more complex sites. Party proposes specific cleanup action which is subjected to DEQ review and approval based on public comments.	Party pays cost of cleanup plus $60-70/hour for DEQ oversight. No time limit. Party can terminate at any point and site will remain on DEQ inventory.
	Washington (Consent Agreement Program)	Department of Ecology, Toxic Cleanup Program	Process identical to enforced action. Department must approve Investigation Work Plan. Department must then approve Remediation Work Plan, including feasibility study, and choose remedy.	Prepayment for oversight required. Payment methods written into initial agreements. Schedule stipulated in Consent Decree as "Restoration Time Frame".
	Washington (Independent Action Program)	Department of Ecology, Toxic Cleanup Program	No workplan required. Party must submit report when cleanup complete. Department reviews report and examines site.	Department reviews final report and examines site. Fee structure for reviews is being established. No time limits.

TABLE V-20

Voluntary Remediation Programs: Sites and Cleanup Standards

SUMMARY

- In most programs, a number of criteria, including State and Federal standards and guidelines, background quality, and risk assessment, are applied to determine cleanup levels.

TABLE V-20
VOLUNTARY REMEDIATION PROGRAMS: SITES AND CLEANUP STANDARDS

Region	Program	Number of Sites	Covered Sites	Cleanup Standards
1	Maine	4	Any site is eligible, but DEP has discretion in accepting VRAP (i.e., if site is high priority enforcement, RCRA, etc.)	Groundwater cleanup levels based on State drinking water criteria (Maximum Exposure Guidelines), Federal MCLs, and applicable State surface water criteria. Soil cleanup on site-by-site basis using State risk assessment model and leaching to groundwater model. If site a UST site and only TPH is confirmed on site, use petroleum decision tree guidance to set soil cleanup levels. Cleanup levels for Voluntary Program must be same as for Superfund enforcement.
	Massachusetts	0	Any site with a release of oil or hazardous material is eligible.	Party chooses most stringent standard that applies: protection of surface water; MCLs and State drinking water standards for areas that are potential drinking water sources; shallow groundwater standards for cases with potential for volatile reaction in occupied buildings. Two sets of soil standards for each groundwater category. Standard is based upon frequency, type and intensity of exposure. Alternative methods include site-specific risk assessment and standards.
2	New Jersey	625	Only non-priority sites based on a ranking system are eligible. Criteria for ranking are: 1) effect of contaminant on receptors; 2) media impacted 3) likelihood of contaminant in each medium affecting receptors; 4) sensitivity of receptors.	Groundwater Quality Standards offer numerical criteria based on classification of areas as: 1) highly protected, 2) potential water supply, 3) naturally saline. Soil Cleanup Criteria used as guidance include 3 sets of standards: 1) surface contact standards for residential sites, 2) surface contact for nonresidential sites, and 3) subsurface leachate standards. DEPE will adjust standards to meet allowable risk set in Industrial Site Recovery Act and repropose Soil Cleanup Regulations.
3	Delaware	2	Any site where there is a release or potential release of a hazardous substance (CERCLA list and petroleum) if another department (RCRA or UST) does not have jurisdiction.	Site-specific risk assessment under Delaware Regulations governing Hazardous Substance Cleanup. Apply USEPA Risk Assessment Guidance, taking exposure pathways and land use into account.

TABLE V-20
VOLUNTARY REMEDIATION PROGRAMS: SITES AND CLEANUP STANDARDS

Region	Program	Number of Sites	Covered Sites	Cleanup Standards
3	Virginia	No sites yet accepted	Any site that is not contaminated with petroleum and is not claimed to be under the jurisdiction of RCRA or State superfund programs.	Site-specific risk assessment must be performed to determine cleanup levels. Department uses USEPA Region 3 guidance "Risk-Based Concentration Tables". Party must use guidance assessments to determine acceptable constituent concentrations for specified risk parameters. Department is in process of developing its own list of constituent concentrations for health risk-based cleanup levels.
4	North Carolina (Consent Agreement Program)	30	Any site not 1) contaminated with petroleum, 2) permitted or on interim status under RCRA, or 3) under Department of Environmental Management (DEM) jurisdiction. DEM has jurisdiction over petroleum and groundwater contamination sites. Department handles groundwater sites only if DEM allows voluntary cleanup.	Cleanup goals consist of; 1) levels derived from site-specific risk assessment (USEPA Superfund Risk Assessment Guidelines) for each contaminated medium, 2) leachable levels for soil and sediment contaminants not exceeding State ambient groundwater standards, and 3) Federal and State groundwater and surface water standards. Remedial action designed to meet all three criteria. If this is infeasible, Department may place usage restrictions on deed.
	North Carolina (Independent Action Program)	5-10 reports reviewed	Any site not; 1) contaminated with petroleum, 2) permitted or on interim status under RCRA, and 3) under Department of Environmental Management (DEM) jurisdiction.	Cleanup goals established by the same methodology as the state's Consent Agreement Program. Remedial action must be designed to meet all three criteria. If this is infeasible, Department may place usage restrictions on deed.
5	Illinois	Agreements at 288 sites, remediation underway at 70 sites, remediation completed at 39 sites,	Any site contaminated with hazardous substances or pesticides except; 1) sites contaminated with petroleum, 2) sites covered under RCRA or LUST Regulation, or 3) sites currently subject to environmental enforcement actions. Sites which present an immediate and significant risk of human or environmental harm are eligible. If such a site is not being effectively remediated by owner or operator, IEPA will undertake enforcement actions.	IEPA establishes cleanup objectives for various environmental media which must all be as protective as State's groundwater quality standards. These standards are enforceable and are promulgated in Part 620 of 35 Illinois Administrative Code. For contaminants not included in Code, IEPA uses other published lists such as MCL's. IEPA also may allow site-specific risk assessment (USEPA Superfund Risk Assessment Guidance) if existing standards are infeasible.

TABLE V-20
VOLUNTARY REMEDIATION PROGRAMS: SITES AND CLEANUP STANDARDS

Region	Program	Number of Sites	Covered Sites	Cleanup Standards
5	Indiana	0	All sites eligible for program. DEM reserves right to reject site if; 1) the contamination poses threat to human health or environment, 2) an enforcement action is pending at site, 3) DEM is working on site as part of a federal grant, or 4) application for admission to program is incomplete.	Party proposes cleanup levels under one of three options allowable by DEPE guidance. DEPE reviews cleanup levels and reserves right to reject them if they not protective of human health and environment. Options are: 1) background levels; 2) site specific risk assessment according to EPA Superfund Risk Assessment Guidance; and 3) Tier 2 levels which provide specific default values and equations, based on factors such as contamination type and land use, to determine levels.
	Minnesota	335	Any site not covered by other state or federal regulations (e.g. RCRA, CERCLA, UST). Recent amendments to Land Recycling Act make state superfund sites eligible if no emergency situation exists.	Groundwater cleanup levels based on State drinking water criteria, MCLs and State surface water quality criteria. Soil cleanup levels determined on site-by-site basis using Soil Cleanup Guidance including equations to determine standards for relevant exposure pathway. If soil cleanup level not applicable, levels are determined using BAT, background levels, literature, and other applicable criteria. Cleanup levels must be same as those required for Superfund cleanups.
	Wisconsin	No accurate figure available	Any site not covered by another regulatory scheme. High priority sites require Department involvement, including oversight and a consent decree. Criteria for determining priority include: waste volume, contaminant volume, toxicity, proximity to population, sensitive environmental criteria.	Cleanup to background or to groundwater standards now required. Department has numerical groundwater standards, is creating numerical soil standards. Risk assessments not allowed.
7	Missouri	0	All sites not subject to other regulatory requirements, such as 1) RCRA corrective action and violations; 2) Leaking Underground Storage Tanks (LUST) authority; CERCLA; and 4) Missouri Hazardous Waste Management law.	Cleanup standards conducted to "any use" (also known as "residential") levels. DNR does not rely on institutional controls. Cleanup standards developed on a site-by-site basis, are based on a health risk assessment, which is considered satisfactory unless DNR has overriding environmental concerns.
8	Utah	11 sites pending, 21 in progress, 2 completed	Sites contaminated by RCRA hazardous waste, but not requiring RCRA permits are eligible. Pre-1980 or abandoned sites may be allowed into program on a case-by-case basis.	DEQ requires cleanup to background levels. Economic and technical feasibility may alter the level of cleanup. DEQ is drafting rules that allow site specific risk assessment, in accordance with EPA guidance, as alternative to background levels.

TABLE V-20
VOLUNTARY REMEDIATION PROGRAMS: SITES AND CLEANUP STANDARDS

Region	Program	Number of Sites	Covered Sites	Cleanup Standards
10	Oregon	20 waiting to enter program, 60 being cleaned, 10 sites cleaned,	Any site eligible, but sites subject to federal action usually excluded.	Cleanups must assure protection of present and future public health, safety, welfare, and environment. Party can use: 1) background; 2) site specific risk assessment; and 3) numerical soil standard codified in OAR 340-122-045, to determine cleanup standards. Soil standards must show; a) acceptable methodology, b) number, nature and source of contaminants, c) water and sensitive environments will not be affected, and d) cancer risk level will be under limit.
	Washington (Consent Agreement Program)	3 negotiating to enter program, 4 sites being cleaned	Any site is eligible.	Party has 3 options to establish cleanup levels. Method A, for simple sites, defines levels for 25 substances. Method B levels are set using site risk assessment, focusing on contaminant interaction. Method C, for use at industrial sites or when A and B are impossible to achieve, is similar to Method B except less stringent lifetime cancer risk limit.
	Washington (Independent Action Program)	2500 actions submitted, only a few approved	Any site is eligible.	Party has 3 options to establish cleanup levels. Method A, for simple sites, defines levels for 25 substances. Method B levels set using site risk assessment focusing on contaminant interaction. Method C, for use at industrial sites or when A and B impossible to achieve, similar to Method B except less stringent lifetime cancer risk limit.

TABLE V-21

Voluntary Remediation Programs: Public Participation, Liability, and Reopening Provisions

SUMMARY

- 8 programs have public notice requirements at various stages of the voluntary cleanup process.
- 11 State programs reserve the right to reopen a site if previously unavailable information indicates that a site poses a threat to human health and the environment.

TABLE V-21
VOLUNTARY REMEDIATION PROGRAMS: PUBLIC PARTICIPATION, LIABILITY, AND REOPENING PROVISIONS

Region	Program	Public Participation	Liability Provisions	Reopening Provisions
1	Maine	No public participation requirements. In all cases Department notifies local officials. Department holds public meetings if site is proceeding to cleanup and meetings requested.	All parties completing cleanups eligible for Certificates of Completion. Non-responsible parties involved in cleanup protected from liability for cleanup or for aggravating contamination. No Further Action letters provide no enforcement action will be taken if voluntary action being taken. NFA letters also written if no cleanup required or pollution source off-site. Liability protection only for RPs performing complete cleanup.	The Department reserves the right to reopen the site if new information shows that the site poses a threat to human health and the environment. If voluntary party was non-responsible party, Department must find responsible party.
	Massachusetts	Notification is given throughout response action. Public lists of sites are maintained. Permits are published for review. If 10 individuals petition, a public involvement plan, consisting of public meetings and hearings, is required.	None. A Covenant Not to Sue may be entered into on site-by-site basis.	Sites may be reopened at any time; DEP audits a set percentage of sites within 5 years of completion.
2	New Jersey	No requirements.	No release from liability. A No Further Action Letter is given, but does not preclude further state action.	DEPE reserves right to reopen site if new information indicates site poses threat to human health and environment.
3	Delaware	Notice and 20 day comment period required before Department approval of remedy selection. Public meeting or hearing may be held.	No release from liability. Certificate of Completion of Remedy provides that Department will not initiate cleanup action unless new information is discovered.	Department reserves right to reopen site if previously unavailable information indicates site poses threat to human health and/or the environment.
	Virginia	Department will require public notice before sign-off. Undecided whether Department or party will provide public notice.	No release from liability. Only provision is the No Further Action letter.	Department reserves the right to reopen the site if previously unavailable information indicates that the site poses a threat to human health and the environment. Stipulated in the No Further Action letter given at sign-off.

TABLE V-21
VOLUNTARY REMEDIATION PROGRAMS: PUBLIC PARTICIPATION, LIABILITY, AND REOPENING PROVISIONS

Region	Program	Public Participation	Liability Provisions	Reopening Provisions
4	North Carolina (Consent Agreement Program)	Notice of development of Remedial Action Plan provided upon request. 30-day comment period after development of Plan. Public hearing held if public interest warrants. Party may be required to submit Plan to local health officials, deed registry, libraries.	No release from liability. No Further Action status guarantees no new cleanup action provided no new discovery.	Department reserves right to reopen site if new data indicates threat to human health and the environment.
	North Carolina (Independent Action Program)	No requirements.	No release from liability. No Further Action status does not preclude future state action. Because site listed on state inventory, Department may decide to enforce cleanup at any time prior to sign-off.	Department reserves right to reopen site if new data indicates threats to human health or the environment.
5	Illinois	Public notices and hearings not required. IEPA may conduct public meetings and solicit public comments at Program sites which are subjects of community concerns.	No release from liability. Upon successful completion of action, IEPA may issue a release pursuant to Section 4(y). Section 4(y) in no way affects site owner's or operator's potential strict, joint and several liabilities for costs of response to release or threatened release at site.	IEPA receives right to reopen for any reason.
	Indiana	DEM must publish notice of all actions. Public hearing may be held before DEM approval of work plan, if requested by public.	1) Covenant Not to Sue provides protection from claims resulting from release that was subject of plan, but does not cover conditions unknown to Commissioner at sign-off; 2) statute protects party against outside actions for contribution concerning matters addressed in voluntary cleanup; 3) statute protects party from suits that arise during implementation of work plan; 4) liability provisions do not affect claims against third party for contribution.	DEM will reopen only if it finds information provided by party was false.

TABLE V-21
VOLUNTARY REMEDIATION PROGRAMS: PUBLIC PARTICIPATION, LIABILITY, AND REOPENING PROVISIONS

Region	Program	Public Participation	Liability Provisions	Reopening Provisions
5	Minnesota	No public participation requirements. Department notifies local officials. Public hearings held if requested.	Certificates of Completion for non-responsible parties provide no further state action. For RPs provide no state action against lenders and successors. Parties can enter into covenant not to sue. Non-responsible parties involved in cleanups protected from liability for cleanups and for aggravating contamination. No Further Action letters provide no state action if voluntary action underway or no cleanup required. No liability if contamination from off-site source.	Department reserves right to reopen site if new date indicates threat to human health and the environment. If voluntary party was non-responsible party, Department must find an RP to clean up reopened site.
	Wisconsin	No requirements. Department encourages public notice and public meetings by party.	Responsible Party Letter stipulates responsible parties for contamination. Close-Out Letter provides same liability protection as No Further Action Letter.	Department reserves right to reopen site if new data indicates threat to human health and the environment.
7	Missouri	No formal public participation procedures.	No Further Action Letter does not release party from cleanup liability. DNR reserves right to require party to conduct additional environmental assessments or remedial action if future monitoring identifies additional contamination.	If monitoring at or near site indicates additional contamination (not identified by environmental assessment or remediated according to plan), No Further Action Letter allows DNR to require onwer or responsible party to conduct additional environmental assessments or remedial actions.
8	Utah	Notice and 30 day comment period required before Consent Agreement is signed.	None. DEQ may enforce at any time, despite approval of cleanup phases. Sign-off letter has no legal significance.	DEQ reserves right to reopen site if new information indicates site poses threat to human health and environment.
10	Oregon	4-week public notice and comment period required before work plan approval.	DEQ issues No Further Action Letter if information is correct and remedy succeeds. Party may enter a Covenant Not To Sue, negotiated on site-by-site basis.	DEQ reserves right to reopen site if new information shows threat to human health and the environment. Provision is stipulated in the No Further Action Letter.
	Washington (Consent Agreement Program)	Public notice of agreements. Public Comment period.	No release from liability. Department will remove site from hazardous site list and issue No Further Action Letter.	Department reserves right to reopen site if new data indicates threat to human health and the environment.

TABLE V-21
VOLUNTARY REMEDIATION PROGRAMS:
PUBLIC PARTICIPATION, LIABILITY, AND REOPENING PROVISIONS

Region	Program	Public Participation	Liability Provisions	Reopening Provisions
10	Washington (Independent Action Program)	No public participation. Comment period if Department removes site from hazardous site list. Receipt of cleanup reports noted in biweekly publication.	When report approved, Department removes site from hazardous sites list and may issue No Further Action letter.	Department reserves right to reopen site if new data indicates threat to human health and the environment.

CHAPTER VI
STATE SUMMARIES

This chapter presents concise summaries of each State's hazardous cleanup program. The States are grouped by U.S. EPA Regions. Nine program elements are described in each of the summaries as follows:

- Sites - numbers of final, proposed, and deleted NPL sites and numbers of State sites (non-NPL) that are known and suspected, identified as needing attention, and included on an inventory or priority list.

- Statutory Authorities - legislation providing cleanup, funding, and enforcement authorities.

- Program Organization and Funding - State agency(s) responsible for hazardous cleanup activities, including numbers of program and legal staff, and sources of administrative funding.

- Cleanup Activities - information on numbers of cleanup actions at NPL and non-NPL sites.

- Cleanup Funding - information on State funds or funding mechanisms, sources of funds, and fund balance, additions, obligations and expenditures for the fiscal year 1993.

- Cleanup Polices and Criteria - information on State cleanup policies and criteria used to determine cleanup levels and/or to select a site remedy.

- Public Participation - information on State regulatory requirements, policies, and ad hoc practices for public participation in the State cleanup program.

- Enforcement - information on statutory provisions for State enforcement actions, liability standards, cleanup penalties and damages, natural resource damages, and property transfer restrictions.

- Federal/State Partnerships - lists existing agreements between the State and U.S. EPA concerning cleanup grants and procedures; specific agreements are Superfund Memorandum of Agreement (SMOA), Core Program Cooperative Agreement (CPCA), and Site - Specific Cooperative Agreement (SSCA).

REGION I

Connecticut
Maine
Massachusetts
New Hampshire
Rhode Island
Vermont

CONNECTICUT

SITES

NPL Sites		State Sites	
Final:	15	Known and Suspected:	1475
Proposed:	0	Identified as Needing Attention:	579
Deleted:	0	On Inventory or Priority List:	642

STATUTORY AUTHORITIES

The *Public Act 87-561*, codified at Conn. Gen. Stat. §22a-114 and §§22a-133a through -133k (1987, as amended 1989), creates the State superfund program, and authorizes fund expenditures, cost recovery, and priority list.

The *Emergency Spill Response Fund*, Conn. Gen. Stat. §22a-451(d) (1982), establishes the response fund, provides enforcement authorities, and allows for replacement of water supplies.

The *Transfer of Hazardous Waste Establishments Program*, Conn. Gen. Stat. §§22a-134 through -134e (1985), creates a property transfer program.

Water Pollution Control Laws, Conn. Gen. Stat. §§22a-432, 22a-433 (1967 and subsequent amendments), provide authority for administrative cleanup orders.

The *Urban Sites Remedial Action Program*, Conn. Gen. Stat. §229-133m (1992, amended 1993), provides funding to clean up urban industrial sites and restricts property tranfers.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Protection, Bureau of Water Management, Permitting, Enforcement and Remediation Division includes 48 staff associated with remedial activities. The Attorney General's office provides legal support with several attorneys working part-time on State superfund and enforcement of remedial action orders (2-3 FTEs). Funds for staff and administration are from the State general fund (59%), a spill fund (18%), and Federal grants (23%).

CLEANUP ACTIVITIES

The State inventory of 642 sites includes 63 sites that have been cleaned up. Approximately 833 sites are in the discovery stage, under consideration for listing on the inventory. 211 remedial actions are underway at non-NPL sites. Sixty-three remedial actions have been completed since the start of the program, 11 have taken place in the last fiscal year (ending 6/30/93). At 11 NPL sites, remediation is currently underway. Following RI/FS, 1 NPL site has been categorized as NFA (no further action).

CLEANUP FUNDING

Funding vehicles include the Emergency Spill Response Fund, the State superfund, and the Urban Sites Remedial Action Fund. Sources for the funds are general obligation bond funds authorized by Special Acts in 1986, 1987, 1989, 1991, and 1993. The Emergency Spill Response Fund is also funded by a generator tax and hazardous waste civil penalties and criminal fines. This fund is administered in, and primarily used by the Oil and Chemical Spills Response Division of the Waste Management Bureau. The ESRF may be used for studies and design, emergency response, removals, remedial actions, and CERCLA match.

The State superfund had a balance of $6.78M at the end of the fiscal year (6/30/93). The fund monies can be used for site investigation, studies and design, removals, remedial actions, CERCLA match, O&M, and natural resource restoration. The Urban Sites Remedial Action Fund had a balance of $15M (6/30/93). The fund can be used for the same activities as the State superfund except CERCLA match.

In order to expend funds from the State superfund, DEP must determine that a threat is unacceptable, and DEP must be unable to determine the RP, or the RP must be in non-compliance with or appealing an order.

CLEANUP POLICIES AND CRITERIA

Cleanup criteria are determined on a site-by-site basis. Water quality criteria and MCLs are applied where appropriate. Cleanup levels for soil and water are usually based on the MCL or State Drinking Water Action Level. If no such reference standard exists, the Department of Health will assist DEP in setting a risk level. Background levels are rarely applied. Regulations setting cleanup standards for hazardous waste sites will be issued by November 1994.

PUBLIC PARTICIPATION

The State has no formal public participation requirements. DEP contacts local officials with the cleanup workplan and holds public meetings at various stages of investigation and cleanup at State-funded sites.

ENFORCEMENT

Liability

Legal authorities available include strict, joint and several liability, orders for information and site access, subpoena authority, administrative and consent order authority, injunctive action and cost recovery authority. Civil penalties of $25K/day are available under the hazardous waste program, 1.5 times punitive damages are available in cost recovery actions. A property lien provision is also available. The preferred enforcement method is consent order, followed by administrative order or court action. The State is required to attempt cost recovery.

Natural Resource Damages

No Natural Resource Damages program has been established.

Property Transfer

Law requires sellers to disclose the presence of hazardous substances on a contaminated site before transfer and requires that a party to the transfer accept responsibility for implementing required remedial measures.

FEDERAL/STATE PARTNERSHIPS

The State has SSCAs with U.S. EPA.

MAINE

SITES

NPL Sites		State Sites	
Final:	9	Known and Suspected:	370
Proposed:	1	Identified as Needing Attention:	160
Deleted:	0	On Inventory or Priority List:	370

STATUTORY AUTHORITIES

The Uncontrolled Hazardous Substance Sites Act, Maine Rev. Stat. §§1361 through 1371 (1983, as amended 1985, 1987, and 1990) provides for a cleanup fund and enforcement authorities.

An Act to Assist in the Cleanup of Contaminated Property, P.L. 1991, Chapter 81, L.D. 156 (May 6, 1991) protects innocent landowners from liability for cleanups of spills caused by others.

P.L. 355, 1993, MRSA §§343-E and 343-F (1993) amended several of DEP's authorities for regulating hazardous waste and created a new property transfer program, as well as a program for voluntary cleanup of hazardous waste sites.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Protection, Bureau and Solid Waste Control, Division of Site Investigation and Remediation, has 27 staff. One and one-half positions in the Attorney General's office are devoted to Superfund-type enforcement activity. DEP is also working with the Bureau of Health in conducting risk assessments and lab work. Funding for program comes from Federal grants, State cleanup funds, and the State general fund.

CLEANUP ACTIVITIES

Maine has 5 remedial actions (RAs) underway at NPL sites. One remedial action has been completed in the last fiscal year and 1 since the start of the program. Two removals are underway, 1 completed in the last fiscal year (7/1/92-6/30/93) and 10 since the start of the program. At non-NPL sites, there are 4 RAs underway. Two RAs at non-NPL sites were completed during the last fiscal year and 10 have been completed since the start of the program. Six removals are underway at non-NPL sites; 6 were completed during the last fiscal year, and 28 have been completed since the start of the program.

CLEANUP FUNDING

Maine has 2 accounts that are used for cleanup funding: (1) The Uncontrolled Sites Bond Account contained approximately $1.6M, as of 10/93; and (2) The Uncontrolled Sites Fund contained $3.1M as of 12/92. Both funds can be used for site investigation, emergency response, removals, studies and design, remedial actions, O&M, and grants to local government, program administration, natural resource restoration and CERCLA match.

The Uncontrolled Sites Bond Account (USBA) received an additional $1.9M as of 7/1/93; it is funded largely by sales of bonds, and cost recoveries, but also receives smaller amounts of appropriations, fees, interest, penalties and taxes. As of 8/93, Maine had expended $1.0M from the USBA and had obligated another $2.4M.

The Uncontrolled Sites Fund (USF) received an additional $869K as of 7/1/93; it is also funded mostly by bonds and cost recoveries, with smaller amounts from appropriations, fees, interest, penalties and taxes. As of 8/93, Maine had spent $175K of the USF and had no outstanding obligations from it.

CLEANUP POLICIES AND CRITERIA

Maine determines cleanup levels on a case-by-case basis. Risk to human health, future water uses, drinking water standards and toxicity levels are all considered. A risk level of 10^{-5} is used for carcinogens. At urban sites or rural areas where drinking water is not affected, Maine has applied background level cleanup standards for groundwater contamination.

PUBLIC PARTICIPATION

Maine has no formal requirements for public involvement. DEP policy is to keep local officials and residents informed. Records are open for public inspection under Maine's FOIA.

ENFORCEMENT

Liability

Legal authorities include strict, joint and several liability, orders for information, site access and remediation, administrative order authority, cost recovery, liens and punitive (treble) damages. The Commissioner must designate a site for consent decree. Penalty authority is derived from the hazardous waste statute. DEP also has a property forfeiture provision.

Natural Resource Damages

Maine's program has existed since 1991 and has recovered $1M. Three NRD claims are now pending. Recovered funds can be used for program administration and NRD assessment as well as to restore or replace damaged resources.

Property Transfer

Maine's 1993 amendments impose a duty on auditors to disclose the private requestor of an audit any discovery of a release or presence of hazardous substances on a site that may cause significant threats to public health or the environment; and the property owner then has a duty to disclose their presence to DEP. Maine has superlien authority. State liens on cleaned up property take priority over any lien filed after the date of the law. State liens on other property have normal priority.

FEDERAL/STATE PARTNERSHIPS

For FY93, Maine had SSCAs and a CPCA with U.S. EPA.

MASSACHUSETTS

SITES

NPL Sites		State Sites	
Final:	24	Known and Suspected:	6328
Proposed:	6	Identified as Needing Attention:	5867
Deleted:	1	On Priority List:	524

STATUTORY AUTHORITIES

The *Oil and Hazardous Material Release Prevention and Response Act*, Mass. Gen. Laws Ch. 21E (1983, as amended in 1986 and 1992), provides for strict, joint and several liability, site access, information and administrative order authority, injunctive relief, civil and criminal penalties, cost recovery and treble damages, priority liens, citizen suits, thresholds for notification of releases, opinions by Licensed Site Professionals regarding the adequacy of response actions, permit actions for certain response actions, permit and annual compliance assurance fees, covenants not to sue, contribution protection, a mandatory dispute resolution mechanism for contribution claims, right-of-entry for private parties conducting response actions, limitations of liability for secured lenders and fiduciaries, exemption from liability for innocent homeowners, and authority for the Commonwealth to acquire property and record restrictive covenants.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Protection's Waste Site Cleanup Program has 300 full-time staff. The Bureau of Waste Site Cleanup is the lead bureau administering the Waste Site Cleanup Program. The Bureaus of Waste Prevention and Resource Protection also have staff dedicated to the program. In addition, twelve attorneys from DEP's Office of General Counsel and eight attorneys in the Attorney General's office provide enforcement support. The program is funded through general appropriations (40%), cleanup funds (50%) and Federal grants (10%).

CLEANUP ACTIVITIES

263 remedial actions have been completed at non-NPL sites in Massachusetts. One remediation action has been completed at an NPL site.

CLEANUP FUNDING

Bonds fund public response actions. Bond revenues totaling $22M remain available as of 7/93 (out of $85M authorized) and may be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, and O&M. Bonds are repaid by cost recovery, and hazardous waste transporter fees (approx. $6M/yr) are used for debt service. A total of $10M were expended from the Bond Fund during FY93 (7/1/92-6/30/93).

The Environmental Challenge Fund (ECF) had a balance of $1.6M as of 6/30/93, with an annual addition of $5.7M. The ECF receives funds from cost recoveries, fees, fines and penalties, and can be used to pay for program administration and personnel only. A total of $4.1M were expended from the ECF during FY93.

CLEANUP POLICIES AND CRITERIA

Permanent solutions require the elimination of significant risk of harm to health, safety, public welfare and the environment. Cleanup background is required where feasible. Temporary solutions are required at all sites until a permanent solution becomes feasible.

Regulations (the Massachusetts Contingency Plan) establish 3 methods for characterizing risk at disposal sites. One method relies on numeric cleanup standards for 105 chemicals in 3 groundwater categories and 3 soil categories. The other methods establish cleanup goals based on site-specific conditions and/or quantitative risk assessment. For sites at which risk assessment is used to determine cleanup standards, any applicable or suitably analogous Massachusetts health and environmental standard must be met, and Cumulative Receptor Risk Limits must be achieved. The noncancer risk limit is a cumulative (additive) excess lifetime cancer risk of 10^{-5}. The Hazard Index is calculated for groups of chemicals with the same mechanism of toxic action.

Restrictions on site use (Activity and Use Limitations) are required if the remediation goals are based upon anything less than the most sensitive (i.e., residential) use.

PUBLIC PARTICIPATION

The statute and regulations require public notice of all Tier classifications of disposal sites and applications for Tier I permits for response actions. Public Involvement Plans are prepared upon citizen petition. State technical assistance grants and public site inspections are also available. Local officials are informed of key site activities throughout the cleanup process. The person conducting the response action is required to implement the required public participation activities.

ENFORCEMENT

Liability

Massachusetts has strict, joint and several liability. DEP provides PRPs with an opportunity to clean up a site; if the party cannot or will not, DEP may clean up the site and recover costs. Administrative orders have not been used frequently, due to the appeals process. The rate of voluntary cleanups is high (80%-85%), which program staff attribute to the state's provisions for priority liens, treble damages and annual compliance assurance fees, which took effect 10/1/93 and are assessed for every year that a site is in the cleanup process. The 1992 amendments authorize DEP to issue an order to remedy an imminent hazard, which is enforceable immediately and not subject to judicial review except in a proceeding to collect penalties for violations of the order or to obtain reimbursement for the costs of complying with the order. Penalties are available up to $25K/day per violation.

Natural Resource Damages

Massachusetts' natural resource damages program began in 1983, and a total of $19M has been recovered by Federal and State trustees at 1 EPA-lead NPL site.

Property Transfer

Massachusetts has no property transfer provision, but does have authority for a super lien and maintains a database of sites that is publicly available.

FEDERAL/STATE PARTNERSHIP

For FY93, Massachusetts had SSCAs and a CPCA with U.S. EPA.

NEW HAMPSHIRE

SITES

NPL Sites		State Sites	
Final:	17	Known and Suspected:	250
Proposed:	0	Identified as Needing Attention:	250
Deleted:	0	On Inventory or Priority List:	250

STATUTORY AUTHORITIES

The New Hampshire Hazardous Waste Cleanup Fund Act (HWCF), NHRSA Chapter 147-B (1981, as amended 1983, 1985, 1986, 1987, 1990 and 1991), establishes the State's Fund and provides for strict, joint and several liability, criminal penalties, cost recovery, and first priority liens (superliens) on (1) real property where hazardous waste or hazardous material is located, (2) the business revenues generated from the facility on the real property where the hazardous waste or hazardous material is located, and (3) all personal property located at this facility. A lien without priority, effective as of the date and time of recording and filing, can be established against all other property. NHRSA Chapters 147-A and 147-B establish its program for voluntary cleanups.

PROGRAM ORGANIZATION AND FUNDING

The Waste Management Division of the Department of Environmental Services (DES) administers the HWCF. The Division has three bureaus. The Waste Management Division is primarily responsible for Federal and State Superfund work and has 4.5 FTE staff funded or partially funded by the HWCF. The NH Department of Justice provides legal support (a total of 3 attorneys work on all environmental issues) and receives an annual appropriation from the HWCF. Eighty percent of the program's funding comes from the HWCF and 20% from federal grants.

CLEANUP ACTIVITIES

The HWCF is used to fund several staff positions within DES, has been used for emergency removal activities, and for various hydrogeological studies at sites in the preliminary stages of investigation. New Hampshire has 9 NPL sites where remediation is underway and 1 NPL site where removal is currently underway. A total of 9 removals at NPL sites have been completed since the program started.

CLEANUP FUNDING

The HWCF has a balance of $3M (as of 6/93). The HWCF is derived primarily from quarterly fees paid by generators of hazardous waste and recovered costs. An average of $1.2M is collected each fiscal year. An estimated $108K had been obligated from the HWCF as of 6/93. The HWCF can be used for site investigation, operation and maintenance, studies and design, removals, emergency response, remedial action, program administration, and grants to local governments.

A separate account of $1.8M was appropriated for CERCLA match in 1993. NH Rev. Statues Ann. 147-B provides for issuing bonds, to be paid from the HWCF, to fund remedial investigation and cleanup. $760K of those bonds have now been expended, and $735K has been obligated as of 6/93, all on NPL sites.

CLEANUP POLICIES AND CRITERIA

Cleanup levels must meet or exceed any Federal standards. The State cleanup standards and water quality criteria are for petroleum-contaminated virgin soil only and are as stringent as, or more stringent than, Federal standards. Cleanup levels are established by policy and selected on the basis of site-specific, regulatory, and risk-based assessments. Risk levels are set site-by-site, based on the contaminant, affected media and land use. Generally a 10^{-6} risk level is used.

PUBLIC PARTICIPATION

No formal requirements. The State may hold public hearings in enforcement actions. Presently RPMs informally contact local citizens and government officials.

ENFORCEMENT

Liability

The New Hampshire hazardous waste laws provide for strict, joint and several liability. The State is authorized to issue administrative orders including orders for information, site access, and site cleanup. The State also has subpoena and consent order authorities. New Hampshire may take injunctive action to induce a generator to cleanup a site, may impose criminal penalties, and may bring action to recover costs.

Natural Resource Damages

No program.

Property Transfer

New Hampshire has a first priority lien (superlien) on real property where hazardous waste and hazardous materials are located, on business revenues generated by facilities on real property where hazardous wastes and hazardous materials are located, and on all personal property located at such facilities.

FEDERAL/STATE PARTNERSHIP

The State has SSCAs and CPCAs with U.S. EPA.

RHODE ISLAND

SITES

NPL Sites		State Sites	
Final:	12	Known and Suspected:	300
Proposed:	0	Identified as Needing Attention:	60
Deleted:	0	On Inventory or Priority List:	*No list*

STATUTORY AUTHORITIES

The *Hazardous Waste Management Act*, R.I. Gen. Laws, §§23-19.1-1 through 23-19.1-33 (1978, as amended, 1979, 1984, 1987), provides authorities for the cleanup of abandoned/uncontrolled/inactive sites. The Environmental Response Fund was established by amendment, §23-19.1-23 (1984).

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Management, Division of Site Remediation has 31 full-time professional staff; 16 work on issues related to CERCLA. In-house legal support is provided by 1 attorney with assistance from 2 attorneys at the Attorney General's office on criminal cases. Federal grants and a cleanup fund provide funds for staff and administration.

CLEANUP ACTIVITIES

Eighty State enforcement orders have been issued. Remediation is underway at about 15 non-NPL sites; removals are underway at about 10. Five remedial actions and 15 removals have been completed at non-NPL sites during the last fiscal year (ending 6/30/93). Remediation is underway at 7 NPL sites and removals are underway at 1. During FY93 and since the start of the program, 1 remediation action has been completed at an NPL site. Approximately 6 removals have been completed at NPL sites, 1 during FY93.

CLEANUP FUNDING

The Environmental Response Fund had a balance of $2M as of 6/30/93. The primary source of the fund is bonds, with smaller contributions from cost recoveries and penalties and fines. Data on additions, expenditures, and obligations were not provided by the State.

The fund may be used for site investigation, emergency response, removals, site evaluation, studies and design, remedial action, CERCLA match, and temporary water supplies, O&M, program administration, and resident relocation.

CLEANUP POLICIES AND CRITERIA

Water quality criteria, MCLs/MCLGs, background levels, and risk standard assessment may be used. Responsible parties propose cleanup objectives for review by the State. Risk levels used for risk assessment are 10^{-4} to 10^{-6} for carcinogens and HI < 1 for non-carcinogens.

PUBLIC PARTICIPATION

The State has no formal requirements or informal procedures for non-NPL site cleanups. For Federal enforcement sites, the process may include hearings where the public can become involved. Public informational meetings are conducted upon request.

ENFORCEMENT

Liability

Legal authorities include "absolute" liability (interpreted as strict, joint and several), subpoena, administrative orders, injunctive action, civil and criminal penalties, cost recovery, and treble damages. Civil penalties of up to $25K/day are also available to the State.

Natural Resource Damages

No program has been established.

Property Transfer

Property transfer provisions consist of disclosure on deed that a site was contaminated. The provision is part of the State Hazardous Waste Management Act. An inventory of sites is maintained but is not yet public.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

VERMONT

SITES

NPL Sites		State Sites	
Final:	8	Known and Suspected:	1291
Proposed:	1	Identified as Needing Attention:	1291
Deleted:	0	On Inventory or Priority List:	568

STATUTORY AUTHORITIES

The Water Pollution Control Law, Vt. Stat. Ann. Title 10, §§1282-1283, provides a contingency fund for emergency responses, studies and design, and remedial actions. Vt. Stat. Ann. Tit. 10, §§1921-1944 provides a petroleum cleanup fund.

The Solid Waste Management Law, Vt. Stat. Ann. Title 10, §§6601-6618 (1977, as amended 1981, 1985, and 1987), provides enforcement authorities.

An Act Relating to Administrative Enforcement of Specified Environmental Laws (Act 98), Vt. Stat. Ann. Title 10, §§8001-8221 (1989), provides additional enforcement authorities.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Conservation, Hazardous Materials Management Division, Hazardous Sites Management Section has 14 technical staff. That section handles all hazardous waste work including CERCLA, RCRA, pre-remedial and State list work. Four attorneys in Attorney General's office, 2 attorneys in DEC's Enforcement Division, and 1 Program Attorney work on hazardous waste cases. Administrative costs come from appropriations (23%), Federal grants (75%), and the cleanup funds (2%).

CLEANUP ACTIVITIES

Remedial action is underway at 2 NPL sites, and 1 removal is underway at an NPL site. Forty-one remedial actions at non-NPL sites were completed during the last fiscal year and 110 non-NPL sites currently have remedial actions underway. Remedial actions at 568 non-NPL sites have been completed as of 11/93.

CLEANUP FUNDING

The Environmental Contingency Fund had a balance of $938K as of 10/31/93, with $1.2M collected in FY93. There is no cap on the ECF. The only funding source is a hazardous waste generator tax. During FY93, Vermont expended $295K from the ECF, all for non-NPL sites.

The Petroleum Cleanup Fund (PCF) had a balance of $606K with $3.7M collected last year. During FY94, Vermont spent $3.1M from the PCF on non-NPL sites. Vermont's 1993 fiscal year ended 1/1/94, and these figures do not include November and December. PCF is generated by an annual tank assessment fee required to be paid by UST owners, which generates $600K per year, and a one cent per gallon motor fuel license fee charged to distributors of gas or diesel fuel, which generates about $3M per year. It also receives appropriations, cost recoveries and interest.

Both funds can be used for site investigation, emergency response, studies and design, remedial actions, removals, operations and maintenance, program administration, and natural resource restoration. However, the PCF can also be used for victim compensation, and the ECF can be used for CERCLA match and grants to local government. PCF covers up to $1M in cleanup costs per site, with a $10K deductible, and $1M in third-party claims. Vermont's CERCLA match is financed out of the ECF. Disbursements for categorical expenditures specified in the statute cannot exceed $50K without the approval of a legislative joint fiscal committee.

CLEANUP POLICIES AND CRITERIA

Cleanup determinations are made on a case-by-case basis. The State uses water quality criteria, based on the State groundwater statute, MCLs/MCLGs, and background quality to determine cleanup levels. Currently, the State is developing procedures for determining cleanup standards on a site-specific basis.

PUBLIC PARTICIPATION

UST regulations require public notice of corrective action. DEC meets with town officials and holds public meetings. There is a statutory requirement to notify municipalities of sites within their borders; site designation must be entered on each town's land record.

ENFORCEMENT

Liability

DEC is required to give a "discharging party" an opportunity to clean up. DEC sends out letters, to be followed by an administrative order in the event of noncompliance. Ninety-five percent of sites are voluntarily cleaned by RPs. The State has strict, joint and several liability and treble damages provisions. Liability apportionment is available if an RP can prove apportionment. DEC has several order authorities, including authority to request information, subpoena documents, issue administrative orders, issue consent orders, and issue orders for entry. Civil penalties are $50K per violation in addition to $1K per day for continuing violation. Penalties and fines to the General Fund; recovered costs go into the ECF.

Natural Resources Damages

Vermont has no NRD program.

Property Transfer

Vermont does not have a property transfer program.

FEDERAL/STATE PARTNERSHIPS

For FY93, Vermont has SSCAs and a CPCA with U.S. EPA.

REGION II

New Jersey
New York
Puerto Rico

NEW JERSEY

SITES

NPL Sites		State Sites	
Final:	108	Known and Suspected:	18,519
Proposed:	1	Identified as Needing Attention:	12,894
Deleted:	5	On Inventory or Priority List:	774

STATUTORY AUTHORITIES

The *Spill Compensation and Control Act*, N.J.S.A. §§58:10-23 *et seq.*, (1976, as amended 1979, 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, 1990, 1991, 1993), established a Fund for cleanups and provides authority for emergency response, removals, remedial actions, enforcement, cost recovery, victim compensation, and damages. Additional authority is provided by the State's *Hazardous Discharges Law*, N.J.S.A. §§13:1k-15 through 13:1k-19 (1984).

The *Industrial Sites Recovery Act* (ISRA) (1993), amended New Jersey's *Environmental Cleanup Responsibility Act*, N.J.S.A. §§13:1k-6 through 13:1k-13 (1983), which requires transferors of industrial facilities to clean up contamination.

PROGRAM ORGANIZATION AND FUNDING

The Site Remediation Program in the Department of Environmental Protection and Energy (DEPE) has 640 staff. The Attorney General's Office provides 28 attorneys for legal support of the program. Funding for staff and administration comes from the Spill Compensation Fund, PRP reimbursements, Federal grants, and the State's bond fund.

CLEANUP ACTIVITIES

The State has 5,405 sites undergoing any phase of the remedial process at non-NPL sites; 8,401 non-NPL sites have been remediated since the start of the program. During the last fiscal year (7/1/92-6/30/93) 1,425 remedial actions and 1,059 removal actions were completed at non-NPL sites. The State has overseen the completion of 2,318 removal actions since the start of the program and 750 removal actions are currently underway.

In FY93, 189 subsites (similar to operable units) at 110 NPL sites were undergoing some phase of the remedial process. One hundred fourteen subsites at 71 NPL sites have been completed since the start of the cleanup program. During FY93, 7 NPL sites had remedial actions completed. Three removals were underway as of 6/30/93 at NPL sites, while 60 have been completed since the start of the program. Three removals were completed in FY93.

CLEANUP FUNDING

New Jersey's Spill Compensation Fund, generated by a transfer tax, penalties, appropriations, cost recoveries, and interest, had a balance of $44.1M at the end of FY93. Funding activities during FY93 consisted of $85.2M in additions, $41.1M in expenditures and $40.6M in obligations. This Fund is used for all categories of cleanup activities at non-NPL sites except for grants to local governments and natural resource restoration, and it is used

for CERCLA match and operations and maintenance at NPL sites. New Jersey's $239.5M Bond Fund, with expenditures of $127.3M on cleanup on both NPL and non-NPL sites, had a balance of $112.2M at the end of the fiscal year. A total of $71.9M of the Bond Fund was obligated during the fiscal year for site cleanups. The Hazardous Discharge Site Cleanup Fund, consisting primarily of cost recoveries and interest, had a balance of $5.2M at the end of the fiscal year. This Fund's activities during FY93 consisted of $25.4M in additions, $20.2M in expenditures and $12.1M in obligations.

CLEANUP POLICIES AND CRITERIA

The State uses water quality criteria, MCLs and MCLGs, background levels, risk assessment, EPA guidelines, and the State's soil cleanup criteria (SCC) guidelines. For soil cleanup, the State may use the SCC or determine case-specific levels by risk assessment using EPA methodology. The risk level used is 10^{-6}. If SCC are determined to be below background levels, then the cleanup level is background.

PUBLIC PARTICIPATION

The Spill Act specifies that actions should "to the greatest extent possible, be in accordance with the NCP." DEPE policy is generally to follow NCP procedures. The State is currently preparing amendments to the technical rules which will provide for greater participation. The State uses a Site Remediation Program Advisory Group to assist in program refinements and improvement. It includes industry, banking, realtors, consultants, environmentalists, and other stakeholders.

ENFORCEMENT

Liability

Liability is strict, joint and several. Civil penalties are authorized up to $50K per day per violation; treble damages may be assessed through cost recovery actions.

Natural Resource Damages

Three staff have been assigned to a formal program, inaugurated July 1, 1993. Prior recoveries were $5M. There are 8 claims currently pending, amounts not disclosed.

Property Transfer

New Jersey's ECRA was the pioneering property transfer law. It required site assessment, disclosure, and cleanup of industrial sites upon transfer; the law was amended in 1993 and renamed the Industrial Sites Recovery Act (ISRA). Cleanup and disclosure is still required, although cleanup may be deferred if the same industrial use is to continue. Transactions that do not comply are voidable by the State or the transferee.

New Jersey's Spill Act gives the State a priority lien for its cleanup costs.

FEDERAL/STATE PARTNERSHIPS

New Jersey has a CPCA and SSCAs with U.S. EPA.

NEW YORK

SITES

NPL Sites		State Sites	
Final:	83	Known and Suspected:	995
Proposed:	2	Identified as Needing Attention:	680
Deleted:	1	On Inventory or Priority List:	935

STATUTORY AUTHORITIES

The *Abandoned Sites Act of 1979* (1979, Chapter 282, Environmental Conservation Law article 27, title 13) mandates statewide inventory and registry of sites, provides order and cleanup authority, and authorizes the State to provide alternative water supplies.

The *State Superfund Act* (1982, Chapter 857), establishes the Hazardous Waste Remedial Fund for cleanup of sites and State CERCLA match. Amendments to the State Superfund Act (1985, Chapter 38) increased the assessments and fees.

The *Environmental Quality Bond Act of 1986* (Ch. 511, Laws of 1986), authorizes $1.2B in bonds to address inactive hazardous waste sites, $100M of which has been redirected for use in cleaning up nonhazardous waste landfills.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Conservation (DEC) has approximately 318 staff working on State and Federal Superfund activities -- 296 funded by State and approximately 22 funded by Federal monies. Most of the personnel work in the Division of Hazardous Waste Remediation. Approximately 18 staff work on State Superfund in the Division of Environmental Enforcement. Seven attorneys with the AG's office work on cleanup issues. Eighty-two staff in the Department of Health work on this program as well.

Appropriations for staff are from the State general fund transferred to Hazardous Waste Remedial Fund. Approximately 92% of funds for staff and administration are from the cleanup fund, 7% are from federal grants, and 1% are from the State general fund.

CLEANUP ACTIVITIES

Of the 935 sites on the State Registry (including sites designated by counties), 667 have investigation, RI/FS, design construction, IRM (interim remedial measure)), or remedial action underway. One hundred seven are awaiting cleanup, 33 are awaiting investigation, and 56 are in a state of deferred action. Sixty-six sites have been cleaned up, of which 56 require O&M. Of 606 non-NPL and NPL sites delisted, 76 were cleaned up, and 530 required no action. A total of 142 non-NPL sites have been cleaned up since the start of the program, and a total of 268 non-NPL removals have been completed since the start of the program, 35 of which have occurred in the last fiscal year (ending 3/31/93). Remediation is underway at 304 non-NPL sites, removals are underway at 22 non-NPL sites. Of 83 NPL sites, remediation is currently underway at 82, and removals are underway at 5. During this fiscal year 8 NPL construction projects have been completed. Six NPL sites have been fully remediated since the start of the cleanup program. Thirty-two removals at NPL sites have been completed since the start of the program, 4 were completed in the last fiscal year.

CLEANUP FUNDING

In 1989, the State began selling EQBA bonds. Of $902.7M remaining in the fund, $99.7M has been obligated (FY93). A total of $60.9M were paid out this fiscal year; $59.8M were spent on NPL sites, and $1.1M were spent on non-NPL sites. In addition, $70.7M were obligated or encumbered this fiscal year; $2M for NPL sites, and $69M for non-NPL sites. The bond money can be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, O&M, victim compensation, grants to local government, and program administration.

Since 4/1/87, assessments, fees, and an oil transfer surcharge have been placed in an "Industry Fee Transfer Account," which will be used to pay for one-half of the debt service on bonds. Waste end fee collections, regulatory fees, and petroleum transfer fee collections totalled $30.9M in 1992/93.

The Hazardous Waste Remedial Fund had a balance of $2.7M as of 3/31/93. During FY93, $54M were added to the fund and $52M were paid out. The Fund is used for debt service of 1986 EQBA bonds. A small portion of the money is used for program administration.

CLEANUP POLICIES AND CRITERIA

Cleanup levels are established by water quality criteria, MCLs/MCLGs, background levels, risk standard assessment, and EPA guidelines. When the cleanup of a site to the predisposal condition is not possible or feasible, DEC specifies generic soil cleanup objectives which, if attained, would eliminate all significant threats. Risk levels are set at 10^{-6}.

PUBLIC PARTICIPATION

Statutes and regulations require the DEC to develop a citizen participation program at the start of RI/FS that includes a site-specific citizen participation plan, establishment of a local document repository, creation of a public contact list, and a mailing of a description of the proposed RI/FS field work. When the Proposed Remedial Action Plan (PRAP) is prepared, a description of the PRAP is sent to the people on the contact list inviting comments. The Department conducts a 30-day comment period, and will hold a public meeting to describe the PRAP and solicit public comments. The Department summarizes and responds to comments received during the comment period when the Record of Decision (ROD) is signed.

In addition, when the Department adds a site to its Registry of Inactive Hazardous Waste Sites, or reclassifies a site within the Registry, it must mail a notification to adjacent property owners and to town and county clerks. The Department must also publish a notice of a proposal to delete a site from the Registry, conduct a 30-day comment period, notify adjacent property owners by mail, and summarize public comments.

ENFORCEMENT

Liability

Legal authorities include orders for information and site access, subpoena authority, administrative order authority, consent order and injunctive action authority. State

regulations defining responsible party result in strict, joint and several liability. The statute makes common law defenses available. Civil penalties of $25K/violation in addition to $25K/day for continuing violations. The penalty doubles for second violation. Criminal penalty of up to $25K/day and/or one year imprisonment are available. Penalties double for a second violation. Cost recovery is also authorized. The preferred enforcement method is negotiated settlement.

Natural Resource Damages

A Natural Resources Damages unit exists in DEC. This unit is charged with developing and pursuing NRD claims. The program began in 1990 and recovered over $20M by April 1993.

Property Transfer

New York is required to maintain a priority list of sites; deed records are required.

FEDERAL/STATE PARTNERSHIP

The State has CPCAs and SSCAs with U.S. EPA.

PUERTO RICO

SITES

NPL Sites		State Sites	
Final:	9	Known and Suspected:	246 (CERCLIS)
Proposed:	1	Identified as Needing Attention:	246
Deleted:	0	On Inventory or Priority List:	*No list*

STATUTORY AUTHORITIES

The *Environmental Emergencies Fund Act*, Law 81 (1987) provides for a cleanup fund and authorizes the Environmental Quality Board to respond to emergencies and recover response costs from liable parties. The Act has no order or injunctive authorities; Puerto Rico relies on other authorities for these purposes, including the *Public Policy Environmental Act*, L.P.R. Ann., tit. 12, § 1121 *et seq.* (1970, as amended).

PROGRAM ORGANIZATION AND FUNDING

The SARA and Emergency Response Office of the Environmental Quality Board has 7 FTE staff working on cleanup activities. Legal support is provided by one attorney from the EQB's Legal Division. Federal grants provide 90% of funding for staff and administration.

CLEANUP ACTIVITIES

One remedial action is underway at a non-NPL site. No other remedial actions or removals have occurred except at NPL sites, where 4 remedial actions and 1 removal are underway.

CLEANUP FUNDING

The Environmental Emergencies Fund ended the fiscal year (6/30/93) with $4.19M. The Fund receives a $1M appropriation each year. It is allowed to receive cost recoveries. In the fiscal year just ended, $555K was paid out for cleanup activities. The Fund may be used for emergency response, removals, studies and design, remedial actions, CERCLA Match, and up to 10% for administrative costs.

CLEANUP POLICIES AND CRITERIA

Puerto Rico uses water quality criteria, MCLs and MCLGs, background, and EPA guidelines for cleanup standards. Risk standard assessment may be used at non-NPL sites. Virtually all cleanup actions are conducted by EPA.

PUBLIC PARTICIPATION

No formal procedures exist. Public meetings are conducted in accordance with the NCP for NPL sites or EPA-lead removal actions.

ENFORCEMENT

Liability

Liability is strict. Civil penalties are authorized up to $25K per day per violation; no punitive damages are available.

Natural Resource Damages
No program.

Property Transfer
No law.

FEDERAL/STATE PARTNERSHIPS
Puerto Rico has a CPCA and SSCAs with U.S. EPA.

REGION III

Delaware
District of Columbia
Maryland
Pennsylvania
Virginia
West Virginia

DELAWARE

SITES

NPL Sites		State Sites	
Final:	19	Known and Suspected:	288
Proposed:	0	Identified as Needing Attention:	89
Deleted:	2	On Priority List:	30

STATUTORY AUTHORITIES

The *Hazardous Substance Cleanup Act*, DCA, Tit. 7, §9101-9120 (1990), provides the authority for emergency response, removals and remedial actions, cost recovery and damages, and establishes a fund for site cleanup.

The *Delaware Regulations Governing Hazardous Substance Cleanup* (January 1993) prohibit site cleanup at a property contemplated for transfer or any other site without the State's approval or oversight.

PROGRAM ORGANIZATION AND FUNDING

The Department of Natural Resources and Environmental Control (DNREC), Division of Air and Waste Management, Superfund Branch has 31 staff. Legal support is provided by the Attorney General's office with one attorney assigned to CERCLA work.

The primary source of administrative funds is federal grants (63%); other sources include the State General Fund (10%), the Cleanup Fund (20%) and a DOD grant (7%).

CLEANUP ACTIVITIES

Remediation is currently underway at 16 NPL sites. Four NPL sites have been fully remediated since the start of the program. One remediation action was completed during the 1993 fiscal year (FY93). Two NPL removals have been completed. Removals are currently underway at 5 non-NPL sites with 1 non-NPL removal completed since the start of the program.

CLEANUP FUNDING

The Hazardous Substance Cleanup Fund had a balance of $4.00M at the end of the fiscal year (6/30/93). Additions to the Fund totaled $2.83M in FY93. Expenditures for activities at non-NPL sites totaled $1.89M. Obligations for non-NPL activities total $3.00M.

The Fund receives petroleum products tax receipts, penalties, cost recovery and interest. The Fund is available for program administration, site investigation, studies and design, removals, remedial actions, emergency response, CERCLA match, and O&M. Forty percent of the Fund is earmarked for cleanup of leaking underground storage tanks.

CLEANUP POLICIES AND CRITERIA

The State has adopted cleanup regulations (January 1993) which specify that cleanup levels will be determined using a risk-based approach on a site-specific basis. Cleanup levels may be based on current and potential future resource uses and reasonable maximum exposures under both current and potential use conditions.

MCLs may be used as the groundwater cleanup level if the DNREC determines it is protective of human health and the environment. Otherwise, when the natural background level exceeds the 10^{-5} cancer risk level or a hazard index (HI) value of 1, the natural background level is the cleanup level. When the background level is less than the 10^{-5} cancer risk level, then the 10^{-5} risk level or a level corresponding to the HI value of 1 is the cleanup level. The same rule applies to soil cleanup levels. Surface water cleanup levels must meet the State's water quality standards.

PUBLIC PARTICIPATION

The public must be notified and provided an opportunity to comment on proposed consent decrees, settlement revisions, and proposed and final remedial action plans.

ENFORCEMENT

Liability

The Hazardous Substance Cleanup Act establishes strict, joint and several liability and authorizes cost recovery. DNREC must attempt a settlement prior to initiating enforcement action, unless an emergency exists. The State has injunctive action and administrative order authority. Civil penalties of up to $10K/day per violation are available. The State may recover punitive damages, treble the State's cleanup costs.

Natural Resource Damages

The *Delaware Regulations Governing Hazardous Substance Cleanup* (January 1993) set forth compensation and restoration or replacement requirements for natural resource damages. PRPs are liable for all damages. No claims are currently pending.

In 1990, $600K was recovered at an NPL site under the NCP.

Property Transfer

7 DCA, Ch. 91 §9115 requires the property owner to place a notice of a release of a hazardous substance, determined by the Secretary to be a threat to public health or the environment, with the recorder of deeds. The Secretary is required to maintain public records that identify the property location, the hazardous substance(s), and the remedial decision record.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA, SSCAs and a SMOA with U.S. EPA.

DISTRICT OF COLUMBIA

SITES

NPL Sites		State Sites	
Final:	0	Known and Suspected:	0
Proposed:	0	Identified as Needing Attention:	0
Deleted:	0	Inventory or Priority List:	*No list*

STATUTORY AUTHORITIES

The *Hazardous Waste Management Act of 1978*, D.C. Code §6-701 *et seq.*, (as amended in 1984, 1989, and 1991), authorizes the mayor to "institute the actions necessary to terminate" a permit where a person fails to take corrective actions to comply with a notice of violation and to immediately revoke a permit where there is imminent danger to public health or the environment. It also provides for injunctions and civil and criminal penalties.

PROGRAM ORGANIZATION AND FUNDING

The Department of Consumer and Regulatory Affairs, Environmental Regulation Administration, Pesticides, Hazardous Waste and Underground Storage Tank Division has 22 full-time staff members, 1 of which is an attorney who devotes 20% of her time to the hazardous waste program.

The District's program is currently funded through Federal grants. They have authority to set up a fee schedule to fund their hazardous waste and toxic chemical source reduction program.

CLEANUP ACTIVITIES

Although the District does not have a cleanup fund for hazardous waste, it has an Underground Storage Tank Trust Fund which will be funded by tank registration fees and penalties.

CLEANUP FUNDING

The District does not have a fund for hazardous waste cleanup. However, it does have an Underground Storage Tank Trust Fund authorized by the Underground Storage Tank Management Act of 1990.

CLEANUP POLICIES AND CRITERIA

The District has promulgated a standard of 100ppm for petroleum and is in the process of looking at standards for other substances. Until it promulgates its own standards the District uses EPA standards and site assessment protocols.

PUBLIC PARTICIPATION

The District has no formal public participation requirements. In each case it gives notice designed to reach persons directly affected by the site.

ENFORCEMENT

Liability

The District has civil penalty authority up to $25K/day per violation, no punitive damage authority, and no specified liability standards.

Natural Resource Damages

The Distict does not have a natural resources damages program.

Propery Transfer

The District does not have a property transfer provision, but it does require written notice and posting of a notice on a property where a release occurs and the responsible party is not known.

FEDERAL/STATE PARTNERSHIPS

MARYLAND

SITES

NPL Sites		State Sites	
Final:	9	Known and Suspected:	463
Proposed:	3	Identified as Needing Attention:	343
Deleted:	1	On Inventory or Priority List:	25

STATUTORY AUTHORITIES

The Annotated Code of Maryland, Environment Art., Tit. 7 -- Hazardous Material and Hazardous Substances, Subtitle 2 -- Controlled Hazardous Substances, §§7-201 through 7-268 (1982, as amended 1984, 1985, 1986, 1987, 1989, 1991, 1992, and 1993) provides for the Hazardous Substance Control Fund and enforcement authorities.

PROGRAM ORGANIZATION AND FUNDING

The Department of the Environment (MDE), Waste Management Administration, Environmental Response & Restoration Program has 2 divisions involved in the superfund process: 1) Site Assessment/State Superfund Division, with approximately 20 full-time staff; and 2) Federal and NPL Superfund Division, with 19 full-time staff. The Attorney General's office has staff located at MDE; 2 attorneys devote approximately 75% of their time to CERCLA. The Core function is under the Waste Management Administration's Planning and Resource Management Program, and has approximately 7 full-time employees.

Funding for the State's superfund program comes from the State cleanup fund and Federal grants.

CLEANUP ACTIVITIES

The State has 31 ongoing non-NPL cleanup projects, including sites where the State oversees RP cleanups. Since the beginning of the State's cleanup program, 1 NPL site has been fully remediated. Remediation is currently underway at 1 NPL and 2 non-NPL sites. No remediation actions were completed during FY93. A removal was completed at 1 non-NPL site during FY93, while 4 NPL and 1 non-NPL sites have removals currently underway. Since the start of the State's cleanup program, removals have been completed at 3 NPL and 24 non-NPL sites.

CLEANUP FUNDING

The Subaccount of the Hazardous Substance Control Fund is funded by bond issuances and cost recoveries. The balance as of 11/93 was approximately $14M. There is no cap on the fund. The State could not provide information on additions to, or obligations or expenditures from the Fund. Authorization from the Board of Public Works is required prior to expenditure; the Board has allocated funding for 33 projects. Fund monies can be used for removals, site investigation, emergency response, studies and design, remedial actions, program administration, O&M and State CERCLA match.

CLEANUP POLICIES AND CRITERIA

State hazardous waste regulations were promulgated in the Hazardous Substance Response Plan - Maryland Register Volume 19, Issue 20 (1992) Volume 20, Issue 9 (1993). Where appropriate, the State also applies water quality criteria, MCLs/MCLGs, risk standard assessment, background levels, and EPA guidelines.

PUBLIC PARTICIPATION

There are no formal requirements. The Community Relations Coordinator or the site project manager arranges public meetings.

ENFORCEMENT

Liability

Maryland has strict, and joint and several liability standards, but provides for apportionment where there is a reasonable basis for determining a party's contribution. The State has civil penalty authority up to $25K/violation.

Natural Resource Damages

The State's natural resource damages program began in 1982. It follows Federal guidelines for NRDP 7-220 use of fund; the State does not have any claims pending or money recovered yet.

Property Transfer

The State does not have a property transfer provision in its superfund law.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

PENNSYLVANIA

SITES

NPL Sites		State Sites	
Final:	98	Known and Suspected:	3,000
Proposed:	1	Identified as Needing Attention:	50
Deleted:	8	On Inventory or Priority List:	10

STATUTORY AUTHORITIES

The Hazardous Sites Cleanup Act (HSCA) (Act 1988-108), 35 P.S. §6020.101 *et seq.*, establishes a State fund and provides for administrative and judicial enforcement authority, cleanup procedures, a priority list, replacement of water supplies, property transfer restrictions, citizen suits, and public participation.

PROGRAM ORGANIZATION AND FUNDING

The State Superfund program in the Bureau of Waste Management, Department of Environmental Resources (DER), has 127 staff. Legal support is provided by the Superfund Enforcement Division of the DER Chief Counsel's Office with 18 full-time attorneys. The State Fund provides 100% of administrative costs.

CLEANUP ACTIVITIES

Remediation is currently underway at 25 NPL sites with 8 NPL sites fully remediated since the start of the program. Six remediation actions were completed at NPL sites during the 1993 fiscal year which ended 6/30/93. Currently, remediation is underway at 1 non-NPL site while 27 sites have been fully remediated since the start of the State program. Removals have been completed at 27 non-NPL sites since the start of the program, 11 of them during FY93.

CLEANUP FUNDING

The Hazardous Sites Cleanup Fund had a balance of $60.50M at the end of FY93. Additions to the Fund during FY93 totaled $45.58M. $34.80M was generated from a capital stock and franchise tax. Hazardous waste transportation and management fees provided the Fund with $2.60M. Minor sources of Fund monies were interest, penalties, and cost recoveries. Expenditures from the Fund in FY93 totaled $45K for the NPL portion and $11.88M for the non-NPL portion of the program. Obligations from the Fund in FY93 were $900K for the NPL portion and $21.57M for the non-NPL portion of the program.

Fund monies may be used for site investigation, studies and design, removals, remedial actions, program administration, CERCLA match, emergency response, victim compensation, and natural resource restoration.

CLEANUP POLICIES AND CRITERIA

HSCA provides that until the State promulgates its own standards, SARA §121 applies. MCLs and EPA guidelines are used when appropriate. On a case-by-case basis, DER may apply more stringent standards including background levels, or it may waive or modify otherwise applicable requirements under HSCA §504.

PUBLIC PARTICIPATION

The State provides public notice of the analysis of a selected response action and alternatives. The Public Notice is followed by a 90-day comment period. A public hearing is held within the 90-day comment period.

HSCA also has a citizen suit provision.

ENFORCEMENT

Liability

HSCA provides comprehensive order and injunctive authorities, orders for information and access, criminal and civil penalties, and treble damages. Civil penalties are a minimum of $5K/day and a maximum of $25K/day. The HSCA provides for NBARs, *de minimis* settlements, natural resource damages, legal presumptions of culpability for contamination, and whistleblower protection.

There is a 120-day notice period before a site may be placed on the State list, to encourage responsible party (RP) cleanup prior to listing. There is also a 120-day moratorium on enforcement at multi-party sites if RPs seek to negotiate shares. For remedial actions extending beyond interim actions, §1301 requires the DER to initiate action against owners or operators under other state laws (e.g. Clean Streams Law and the Solid Waste Management Act) before taking HSCA enforcement or cost recovery actions.

Natural Resource Damages

No program or policy exists at present.

Property Transfer

HSCA §512 requires disclosure on the deed or with the recorder of deeds that the site was or is being used for the disposal of hazardous substances and that the seller disclose the presence of hazardous substances on the site before transfer.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

VIRGINIA

SITES

NPL Sites		State Sites	
Final:	23	Known and Suspected:	3100
Proposed:	2	Identified as Needing Attention:	310
Deleted:	1	On Inventory or Priority List:	0

STATUTORY AUTHORITIES

The *Waste Management Act*, Va. Code §10.1-1400 - 10.1-1457 (1986, as amended 1987, 1988, 1990, and 1993), establishes the State fund as well as permitting and certification requirements, management responsibilities, enforcement authority and penalties, pollution prevention, litter control and recycling, hazardous waste management, siting of hazardous waste facilities, and transportation of hazardous materials.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Quality, Waste Division, Superfund program, has three branches dealing with site cleanup: (1) the Federal facilities program with 4 staff; (2) the site assessment program with 7 staff; and (3) the Superfund remedial program with 10 staff. The Division also has 3 administrative staff for a total of 24 full-time staff. An Office of Environmental Response and Remediation was established in 1993 to oversee removal and remediation at sites under State cleanup authority.

Legal support is provided by 1 half-time attorney in the State Attorney General's office. Federal grants provide 90% of Superfund program costs and the State General Fund provides the remaining 10%.

CLEANUP ACTIVITIES

Currently, remedial actions are underway at 5 NPL sites. One remedial action was completed during the fiscal year (FY93). One NPL site has been fully remediated and deleted from the list since the start of the program.

The State and U.S. EPA provided detailed inspection of 208 sites in the State. Twenty-three of these were placed on the NPL. The State acts as a support agency on all NPL sites, providing the technical review and oversight for all cleanup activities.

CLEANUP FUNDING

The Virginia Environmental Emergency Response Fund was established in 1992. It had a balance of $311K as of 5/28/93. $132K was transferred to the Fund from the former Solid and Hazardous Waste Contingency Fund. During FY93, $112K was added to the Fund from penalties and interest. Expenditures for emergency response totaled $68K.

CLEANUP POLICIES AND CRITERIA

The State uses water quality standard, MCLs, and EPA risk-based guidelines where appropriate. Background level data and state regulations are applied to support EPA decisions. For purposes of the State's new voluntary remediation program, health risk-based cleanup levels are developed on a case-by-case basis.

PUBLIC PARTICIPATION

The Federal Superfund regulations for notice and comment concerning the analysis of NPL site cleanup alternatives are followed. The State initiates additional public outreach activities when it deems these to be appropriate.

ENFORCEMENT

Liability

The State's enforcement authority is limited to sites where waste has been "improperly managed." In such a case, the State has the authority to issue unilateral administrative and administrative consent orders, take injunctive action and impose civil penalties and punitive damages. Civil penalties are up to $25K/day per violation of an order. Punitive damages available from individuals are $25K for making knowingly false statements, $250K for knowingly violating the State's statute or regulations, which places another person in imminent danger of death or serious bodily injury. Corporate defendants are subject to up to $1.00M per offense or an amount equal to 3 times the economic benefit realized as a result of the offense.

Natural Resource Damages

The State has had the authority to recover such damages under the Act since 1990. No damages have been recovered by the State to date and no claims are currently pending.

Property Transfer

The State has no property transfer provisions or restrictions.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA, a CPCA, and SSCAs with U.S. EPA.

WEST VIRGINIA

SITES

NPL Sites		State Sites	
Final:	5	Known or Suspected:	500
Proposed:	1	Identified as Needing Attention:	-
Deleted:	0	On Inventory or Priority List:	51

STATUTORY AUTHORITIES

The *Hazardous Waste Emergency Response Fund Act*, W.Va. Code §20-5G-1 through 20-56-6 (1984), provides a Fund for emergency responses, the State's CERCLA match, and cleanup authorities.

The *Hazardous Waste Management Act*, W.Va. Code §20-5E, (1981, as amended 1985, 1989, and 1991), contains property transfer disclosure requirements.

The *Groundwater Protection Act*, W.Va. §20-5M (1991, as amended 1993) establishes groundwater standards which may be used by the State to determine cleanup levels.

PROGRAM ORGANIZATION AND FUNDING

The Site Investigation and Response Section of the Office of Waste Management, within the Division of Environmental Protection, within the Department of Commerce, Labor, and Environmental Resources, employs 12 full-time staff. The State Attorney General's office provides legal support with one staff member. Federal grants provide 80% of administrative costs, with the Response Fund providing the remaining 20%.

CLEANUP ACTIVITIES

There are no State-lead NPL sites. Remediation currently underway at 4 NPL sites. One NPL site has been fully remediated since the start of the program. No information is available for cleanup activities at non-NPL sites.

CLEANUP FUNDING

The Hazardous Waste Emergency Response Fund had a balance of $2.20M at the end of fiscal year (6/30/93). Additions to the Fund in FY93 totaled $1.11M. A total of $329K was paid out for non-NPL activities. A total of $348K was obligated for NPL activities and $397K for non-NPL activities.

The main source of Fund monies is hazardous waste generator fees. Generator assessments cease if the unobligated balance exceeds $1.50M at the end of the fiscal year. Fees are again assessed when the balance reaches $1.00M.

The Fund may be used for program administration, site investigation, studies and design, operation and maintenance, emergency response, removals, remedial action, and the CERCLA match. The Fund monies may be used only for hazardous wastes not hazardous substances.

CLEANUP POLICIES AND CRITERIA

The State applies EPA guidelines, water quality criteria, and MCLs where appropriate. If no standard is available, background levels and EPA risk assessments may be applied. The State's 1993 Groundwater Protection Act established groundwater standards, equivalent to MCLs in most cases, which will be applied where appropriate.

PUBLIC PARTICIPATION

No formal requirements or informal procedures for public participation exist at present.

ENFORCEMENT

Liability

Prior to fund expenditure, director must make "reasonable efforts" to secure agreements from the owner or operator or other RPs to pay cleanup and remedial action costs. All monies collected pursuant to enforcement action or cost recovery are deposited in the Fund. No enforcement action or cost recovery has been taken to date. Under the Fund Act, the State has the authority to recover costs and interest for unpaid or late paid generator fees up to twice the required fee. Other enforcement actions pertaining to hazardous substances are taken under the State's RCRA equivalent statute.

Natural Resource Damages

No policy or program exists at present.

Property Transfer

The States Hazardous Waste Regulations Ch. 20-5E, 47CSR35 require disclosure on the property deed, lease, or any other instrument, that property or surface of property was used for the storage, treatment or disposal of hazardous waste.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with the U.S. EPA.

REGION IV

Alabama
Florida
Georgia
Kentucky
Mississipi
North Carolina
South Carolina
Tennessee

ALABAMA

SITES

NPL Sites		State Sites	
Final:	12	Known and Suspected:	625
Proposed:	2	Identified as Needing Attention:	125
Deleted:	1	On Inventory or Priority List:	*No List*

STATUTORY AUTHORITIES

The *Hazardous Substances Cleanup Fund*, Ala. Code §22-30A-1 *et seq.* (1988) provides enforcement authorities and a cleanup fund.

PROGRAM ORGANIZATION AND FUNDING

The Special Projects Office in the Office of the Director, Department of Environmental Management has 22.5 FTE staff working on cleanup activities (2.5 in management; 6 in the Engineering Section; 9 in Site Assessment; and 5 in Field Operations). Legal support is provided by 0.3 FTE attorneys in the DEM Office of General Counsel. Funding for staff and administration comes from the State general fund, the cleanup fund, hazardous waste disposal fees, and Federal grants.

CLEANUP ACTIVITIES

The State has 1 remedial action underway at a non-NPL site, and has completed 8 since the start of the program including 2 during the last fiscal year (10/1/92-9/30/93). It has 10 removals underway, and has completed 75 since the start of the program, including 35 during the last fiscal year.

Remedial actions are underway at 6 NPL sites. One remedial action and one removal have been completed since the start of the program.

CLEANUP FUNDING

The Hazardous Substance Cleanup Fund had a balance of $38K at the end of FY93. Additions to the Fund during the year were $34K. The fund receives monies from cost recoveries, penalties, appropriations, and some fees. The Fund paid out $80K during FY93 for actions at non-NPL sites. The Fund may be used only at sites that are not on the NPL at the time the activity starts, and for CERCLA match and O&M; it is primarily used for small-scale removal actions.

CLEANUP POLICIES AND CRITERIA

Cleanup standards include water quality criteria, MCLs and MCLGs, background levels, risk assessments, and EPA Guidelines. Risk levels are generally 10^{-4} for industrial and 10^{-6} for residential areas.

PUBLIC PARTICIPATION

A 30-day comment period on a cleanup plan is required by statute; a single publication of notice in a county paper is sufficient notice. The 30-day comment period is required prior to the State's issuing an administrative order unless there is an imminent threat to human health.

ENFORCEMENT

Liability

Liability is proportional. Civil penalties are authorized up to $25K per day per violation, with a maximum of $25K; no punitive damages are available.

Natural Resource Damages

Program commenced in 1988. No recoveries to date; no pending claims.

Property Transfer

No law.

FEDERAL/STATE PARTNERSHIPS

Alabama has a SMOA, and a CPCA with U.S. EPA.

FLORIDA

SITES

NPL Sites		State Sites	
Final:	55	Known and Suspected:	1015
Proposed:	3	Identified as Needing Attention:	725
Deleted:	4	On Inventory or Priority List:	*No list*

STATUTORY AUTHORITIES

The *Pollutant Discharge Prevention and Removal Act*, §§376.30 through 376.319 (1983, as amended 1984, 1986, and 1988), establishes the Water Quality Assurance Trust Fund and provides enforcement authorities.

The *Resource Recovery and Management Act*, Fla. Stat. §§403.701 through 403.7721 (1974, numerous amendments), establishes certain enforcement provisions and the Hazardous Waste Management Trust Fund.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Protection, Division of Waste Management, Bureau of Waste Cleanup contains 5 sections: (1) Hazardous Waste Cleanup (15 staff); (2) Preliminary Assessment (8 staff); (3) Site Investigation (14 staff); (4) Technical Support (17 staff) and; (5) Enforcement with 6 District staff. In all, approximately 60 staff work in the Bureau. Legal support is provided by 2 attorneys in DER's Office of General Counsel. Twelve additional staff are part of an Emergency Response Program, 5 in Tallahassee and 7 in regional offices. The State general fund, a cleanup fund, Federal grants, and trust funds provide money for staff and administration.

CLEANUP ACTIVITIES

Sixty percent of non-NPL sites are being addressed by RPs, 20% need no action, and 20% are State lead. Remediation is currently underway at 22 non-NPL sites; 27 non-NPL sites have been fully remediated since the start of the cleanup program, 2 in the last fiscal year (ending 6/30/93). Fourteen removals have been completed at non-NPL sites since the start of the program, 2 during the last fiscal year.

Twenty-seven State cleanups at non-NPL sites have been completed, and work is in progress on 22 non-NPL sites. Over 200 RP cleanups are in the RI phase, and 40 are in the RA phase. State-lead cleanups are underway at about 40% of NPL sites. Remediation is underway at 40 NPL sites, 2 remedial actions at NPL sites have been completed in this fiscal year, and 4 NPL sites have been fully remediated since the start of the program. Twenty Removals at NPL sites have been completed since the start of the program.

CLEANUP FUNDING

The Water Quality Assurance Trust Fund was set up with a transfer of $11M from the Coastal Protection Trust Fund. It is now funded by excise taxes, discharge permit fees, interest, transfers from other funds, cost recovery, and penalties and fines. As of the end of the fiscal year (6/30/93), the fund balance was $7.5M unobligated funds. Projected revenue for FY93 is $25M. A tax is levied if the fund balance falls below $5M and suspended if the balance is over $12M. The WQATF funds emergency response, site investigation, studies and design, remedial actions, O&M, grants to local government, program administration, natural resource restoration, and State CERCLA match.

The Hazardous Waste Management Trust Fund serves as a holding account for Federal monies. It contained $863K at the end of the fiscal year. The fund receives money from cost recoveries, interest, penalties, and transfers and can be used for the same activities as the WQATF. The State provided no information on additions, expenditures, or obligations.

CLEANUP POLICIES AND CRITERIA

Cleanup criteria are site-specific based on risk assessments and any existing standards. Water quality criteria, MCLs/MCLGs, background levels, risk standard assessment, and EPA guidelines are used to establish cleanup levels. Risk levels for risk assessment are set at 10^{-6}.

PUBLIC PARTICIPATION

No provisions require citizen participation. Ad hoc citizen involvement varies on a site-specific basis, and may include door-to-door outreach or public meetings if requested.

ENFORCEMENT

Liability

Legal authorities include strict, joint and several liability, administrative and consent order authority, and cost recovery. Punitive damages are not available. Civil penalties of up to $25K/day are available under the hazardous waste statute. The Department does not have unilateral order authority. The enforcement process includes warning notices, consent orders, notices of violations, civil suits, and appeals.

Natural Resource Damages

No NRD program exists, however, fund monies can be used for NRD activities.

Property Transfer

The State has no property transfer provisions.

FEDERAL/STATE PARTNERSHIPS

The State has SSCAs with the U.S. EPA.

GEORGIA

SITES

NPL Sites		State Sites	
Final:	13	Known and Suspected:	800+
Proposed:	0	Identified as Needing Attention:	0
Deleted:	0	On Inventory or Priority List:	*List under development*

STATUTORY AUTHORITIES

The Hazardous Site Response Act of 1992 (HSRA), O.C.G.A. 12-8-90 *et seq.* authorizes a cleanup fund, enforcement authorities, strict, joint and several liability, punitive damages, property transfer provisions and a priority list.

PROGRAM ORGANIZATION AND FUNDING

The Georgia Department of Natural Resources, Environmental Protection Division, Hazardous Sites Response Program has 9 FTEs, funded entirely by the Hazardous Waste Trust Fund. The State Law Department provides legal support with 1 FTE attorney.

CLEANUP ACTIVITIES

The cleanup program under the Hazardous Site Response Act (HSRA) is just getting started, although cleanups have been conducted under the State's RCRA authorities for years. One removal is underway pursuant to the HSRA. Approximately 70 remedial actions are currently underway under the RCRA statute. Remediation is currently underway at 8 NPL sites.

CLEANUP FUNDING

The Hazardous Waste Trust Fund had a balance of $8.26M at the end of the fiscal year (6/30/93). The Fund receives monies from fees on solid and hazardous waste management activities and from penalties and interest. Collection of the fees is suspended when the balance in the Fund equals or exceeds $25M and is not resumed until the unencumbered balance is less than or equal to $12.5M. The Fund may be used for emergency response, site investigation, removals, studies and design, remedial action, O&M, CERCLA match, pollution prevention and program administration.

CLEANUP POLICIES AND CRITERIA

The HSRA requires the Board of Natural Resources to adopt regulations establishing cleanup standards, but those standards have not yet been developed. The State currently applies water quality criteria, MCLs, and background levels.

PUBLIC PARTICIPATION

No procedures exist for public participation, but the agency plans to adopt regulations providing for public participation in developing the site inventory and the cleanup process.

ENFORCEMENT

Liability

The statute provides for strict, joint and several liability, punitive damages at least equal to the State's costs and not more than 3 times those costs, penalties up to $50K/day, cost recovery, site access, and administrative orders.

Natural Resource Damages

The HRSA does not address natural resource damages and the state has no program for collecting NRDs.

Property Transfer

The owner of any site listed on the hazardous site inventory as having a known release and as needing cleanup must include a notice of that listing in any deed or other document that creates an interest in or grants a use of the property. The owner of a listed site must also file an affidavit that the site is listed and must be cleaned up with the clerk of the superior court for the county or counties in which the site is located.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S.EPA.

KENTUCKY

SITES

NPL Sites		State Sites	
Final:	18	Known and Suspected:	1000
Proposed:	2	Identified as Needing Attention:	500
Deleted:	0	On Inventory or Priority List:	12

STATUTORY AUTHORITIES

Kentucky Rev. Stat. Ann. §224.46-580(13)(1980) establishes the Hazardous Waste Management Fund and gives provisions for expenditures. KRS 224.01-400 establishes enforcement authorities and provides for a priority list, citizen suits, and risk guidance.

PROGRAM ORGANIZATION AND FUNDING

The Natural Resources and Environmental Protection Cabinet, Division of Waste Management, Superfund Branch has funding for 11 full-time staff for Federal Superfund sites, and 10 staff for State superfund sites.

50% of the funding for Kentucky's program comes from Federal grants; the rest is funded through the State general fund and the cleanup fund.

CLEANUP ACTIVITIES

The State is actively involved in about 300 sites. More than $500K was paid out last year, mainly for drum removals and other emergencies. Remediation actions were completed at 15 non-NPL sites during the fiscal year, which ended 6/30/93. Since the start of the State's program, 3 NPL sites and approximately 200 non-NPL sites have been fully remediated. Remediation is currently underway at 5 NPL sites and approximately 80 non-NPL sites. Removals were completed at approximately 45 non-NPL sites during FY93, and removals are currently underway at 10 non-NPL sites. Since the beginning of the State's cleanup program, removals have been completed at 10 NPL and 80 non-NPL sites.

CLEANUP FUNDING

The Hazardous Waste Management Fund had a balance of $5M at the end of FY93. There is a $6M cap on the fund. A total of $3M was added to the fund during FY93. A total of $818K was paid out of the fund for non-NPL sites and $967K was obligated for non-NPL sites. $494K was paid out for emergency removal. The total amount obligated includes $325K spent for remedial cleanup.

Fees were a significant source of funding, while cost recoveries, interest, and penalities were also minor sources of funding. The fund may be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, O&M, program administration and natural resource restoration.

CLEANUP POLICIES AND CRITERIA

Responsible parties are permitted to select either a risk-based standard up to 10^{-6} or background levels as the basis for cleanup. The State also uses water quality criteria, MCLs/MCLGs, risk standard assessment (Hazard Index = 1), and EPA guidelines to set cleanup standards.

PUBLIC PARTICIPATION

Kentucky has a Public Information Repository for NPL and State priority list sites. It is standard practice to hold Public Meetings for these sites.

ENFORCEMENT

Liability

The State has civil penalty authority for up to $25,000/day. In practice, Kentucky uses strict, joint and several liability standards.

Natural Resource Damages

Kentucky does not have a natural resources damages program.

Property Transfer

Kentucky's superfund law does not include property transfer provisions.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

MISSISSIPPI

SITES

NPL Sites		State Sites	
Final:	2	Known and Suspected:	390
Proposed:	2	Identified as Needing Attention:	200
Deleted:	1	On Inventory or Priority List:	109

STATUTORY AUTHORITIES

The *Solid Waste Disposal Act of 1974* (amended numerous times, most recently in 1990), Miss. Code Ann. § 17-17-29(4) and (6), enables State to take response action, but there is no specific Superfund law.

The *Property Transfer Act (1993)*, requires disclosure before transfer.

The 1988 Amendments to the *Air and Water Pollution Control Act*, Miss. Code Ann, §§ 49-17-1 *et seq.*, authorize response actions and creates the Pollution Emergency Fund (Miss. Code Ann. § 49-17-68).

PROGRAM ORGANIZATION AND FUNDING

Department of Environmental Quality, Office of Pollution Control, Hazardous Waste Division has a RCRA and CERCLA section. The CERCLA section has 12 FTE employees. These positions are funded almost entirely by State general funds and Federal grants. Four staff attorneys handle all DEQ work.

CLEANUP ACTIVITIES

At non-NPL sites, Mississippi has 76 remedial actions underway. Three remedial actions were completed in fiscal year 1993 (7/1/92-6/30/93). Five removals are underway. In FY93, 250 removals were completed.

At NPL sites, there are 2 remedial actions underway, and 1 site has been fully remediated since the start of the program. Two removals at NPL sites have been completed since the start of the program.

CLEANUP FUNDING

The Pollution Emergency Response Fund was created in 1988 and has a balance of $2.7M as of 6/30/93. It added $500K during the fiscal year, and paid out $440K, all to non-NPL sites. The Fund is authorized to receive money from civil penalties from the pollution regulatory programs, cost recovery, and any other sources. The Fund may be used for site investigation, studies and design, removals, and emergency response. Mississippi appropriates funds on a site-by-site basis for CERCLA match.

CLEANUP POLICIES AND CRITERIA

The State considers background level, water quality criteria, MCLs, EPA guidelines, risk assessment with a generic risk level of 10^{-6}, and U.S. EPA's Hazard Index to determine cleanup levels. The State selects the most stringent of these criteria as the cleanup level.

PUBLIC PARTICIPATION

Policies require a public comment period, direct mailings, and possible public meetings during the remediation process. Local governments and the governor are notified when emergency order issued.

ENFORCEMENT

Liability

Mississippi has strict and joint and several liability. The DEQ must use its general enforcement authorities or its authorities in other regulatory statutes to compel RP action and for enforcement action. The Act provides that any person responsible for creating an immediate need for remedial or cleanup action involving solid waste shall be liable for the cost of such action and that the Department may recover its cost of response. The Act gives DEQ authority to regulate any contamination of the air and waters of Mississippi. The State has civil penalties of $25K/violation plus the cost of removal/remediation and the cost of restocking/replenishing killed fish. There are no punitive damages. RPs come forward and voluntarily sign "Consent Orders." *Ex parte* or Consent Orders are issued at each stage of the process outlining the work to be done.

Natural Resource Damages

Since 1972 State law has allowed DEQ to recover cost of restocking/replenishing killed fish and game. Mississippi has recovered $500K. No claims are pending.

Property Transfer

§89-1-501 - 523 was passed in 1993, requiring disclosure before transfer.

FEDERAL/STATE PARTNERSHIPS

Mississippi has a SMOA, a CPCA and SSCAs with the U.S. EPA.

NORTH CAROLINA

SITES

NPL Sites		State Sites	
Final:	21	Known and Suspected:	665
Proposed:	1	Identified as Needing Attention:	655
Deleted:	1	On Inventory or Priority List:	155

STATUTORY AUTHORITIES

The *Inactive Hazardous Sites Response Act of 1987*, N.C. Gen. Stat. §§130A-310 et seq. (1987, as amended 1989, 1991) authorizes the Inactive Hazardous Sites Cleanup Fund, provides authority to order RPs to conduct cleanup and to recover costs, and establishes a priority list and property transfer requirements.

The *Solid and Hazardous Waste Management Act*, N.C. Gen. Stat. §130A-290 et seq., (1969, as amended 1973, 1975, 1977, 1979, 1981, 1983, 1985, 1987, 1989, and 1991) authorizes the Emergency Response Fund for emergency hazardous waste cleanup, provides enforcement authorities, and requires recordation of property transfers.

PROGRAM ORGANIZATION AND FUNDING

The Superfund Section of the Solid Waste Management Division of the Department of Environment, Health, and Natural Resources has 27.75 staff positions. The Federal Superfund and State Inactive Hazardous Sites programs share 1 attorney from the North Carolina Department of Justice. Funding for the Section comes from the State general fund and a Federal grant for site investigations under Federal Superfund, NPL Support Agency grant, CORE money, and DOD support agency money.

The Emergency Response Fund is administered by the Hazardous Waste Section of the Solid Waste Management Division.

CLEANUP ACTIVITIES

During the fiscal year, which ended 6/30/93, remedial actions were completed at 1 non-NPL site. Since the start of the State's cleanup program, remedial actions have been completed at 1 NPL and 5 non-NPL sites. Remedial actions are currently underway at 3 NPL and 6 non-NPL sites. During FY93, removals were completed at 2 NPL and 9 non-NPL sites. Removals are currently underway at 8 non-NPL sites.

CLEANUP FUNDING

The Inactive Hazardous Sites Cleanup Fund (IHSCF) had a balance of $1.38M at the end of FY93. It received $866K and no funds were paid or obligated from it during FY93. The IHSCF receives most of its money from appropriations, although no appropriations have been made to the fund since FY88-89. Penalties also are a significant source of funding, as the IHSCF receives RCRA penalty money when the Emergency Response Fund exceeds its $500K cap. Cost recoveries, interest, and transfers are also minor sources of funding. The IHSCF can be used for site investigation, studies and design, removals, emergency response, remedial actions, and the cost of recording notices of Inactive Hazardous Substance or Waste Disposal Sites.

The Emergency Response Fund is used only for emergency response and gets all of its funding from RCRA penalties. It is capped at $500K. Excess funds are transferred to the IHSCF.

The Cost Share Trust Fund, which is used only for CERCLA match at NPL sites, had a balance of $1.9M at the end of FY93. It gets its funding from appropriations. The Fund received $800K during the year and no funds were paid or obligated from it.

CLEANUP POLICIES AND CRITERIA

As required by statute, the Secretary of DEHNR will ascertain the cleanup level in conformance with CERCLA and SARA requirements.

The State uses a health-based risk assessment, with an acceptable risk level of 10^{-6} and a Hazard Index of 1. Cleanup levels are calculated for each contaminant by environmental media based on site-specific risks. Water quality criteria, groundwater standards and other applicable State standards are also used where appropriate.

PUBLIC PARTICIPATION

State funded enforcement cleanups require: 3 weeks notice in a newspaper, a 45 day comment period, with a public meeting at the Secretary's discretion, and notice to those requesting to be placed on a mailing list, with a copy filed with the register of deeds and copies placed in local libraries and the County Health Director's Office. Public participation requirements are reduced for RP voluntary cleanup. RP Voluntary Remedial Actions require notice of the remedial action plan to be sent to those requesting to be placed on a mailing list.

ENFORCEMENT

Liability

The Secretary of DEHNR must seek voluntary action by RPs before issuing orders or taking action under the Inactive Hazardous Sites Response Act. The State has strict and joint and several liability standards. There is a cap on liability of $3M for implementation by RPs that volunteer. The State has authority to issue orders for information. Civil penalties are available for solid and hazardous waste violations only.

Natural Resource Damages

North Carolina has no natural resources damages program.

Property Transfer

If the State mails an order to a property owner, the owner must register a notice of an Inactive Hazardous Substances Waste Disposal Site with the grantor index in the deeds office. At the next property transfer, the notice will appear on the deed. North Carolina has a general judgment lien provision.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

SOUTH CAROLINA

SITES

NPL Sites		State Sites	
Final:	24	Known and Suspected:	475
Proposed:	0	Identified as Needing Attention:	200
Deleted:	0	On Inventory or Priority List:	100

STATUTORY AUTHORITIES

The *Hazardous Waste Management Act* (1980, as amended 1989), South Carolina Code Ann. §§44-55-10 through -840 and §44-56-10-330 authorize the Hazardous Waste Contingency Fund and provides for a priority list, the authority to take or compel action, and provisions governing property transfer.

PROGRAM ORGANIZATION AND FUNDING

Department of Health and Environmental Control, Environmental Quality Control, Bureau of Solid and Hazardous Waste Management employs 27 FTE staff. Two attorneys within the Legal Office of the Department provide support. Federal grants account for 66% of staff funding, 19% comes from cleanup funds, and 15% comes from the State general funds.

CLEANUP ACTIVITIES

At non-NPL sites, 2 remedial actions were completed during the 1993 fiscal year (7/1/92-6/30/93), and 13 have been completed since the start of the program. Twelve remedial actions are underway at non-NPL sites. Seven removals are currently underway, and 11 removals have been completed since the start of the program.

At NPL sites, 6 remedial actions are underway. One remedial action has been completed since the start of the program. One removal action is underway, and 6 have been completed since the start of the program, 1 in FY93.

CLEANUP FUNDING

The Hazardous Waste Contingency Fund is an umbrella for two (2) separate accounts, the permitted sites (RCRA) and uncontrolled sites (Superfund). The latter account comprises approximately 75% of the Fund. Roughly 80-90% of revenues come from fees. Appropriations and cost recovery also contribute. The Fund balance for FY93 was $16.9M. In FY93, $3.5M was added to the Fund. A total of $3M was paid out to all to non-NPL sites and $5.1M was obligated, $3M of which went to non-NPL sites. The Fund may be used for site investigation, emergency response, removals, studies and design, remedial actions, O&M, and CERCLA match. The State must exhaust available Federal and RP funds before using the Fund.

CLEANUP POLICIES AND CRITERIA

Site-by-site cleanup decisions are to be consistent with the NCP. Generally, the State applies MCLs for groundwater cleanup and background levels for soil cleanup. The State may also apply water quality criteria and EPA guidelines where appropriate. If no standard exists, a risk standard assessment may be used. Risk levels of 10^{-4} and 10^{-6} are applied for risk assessment.

PUBLIC PARTICIPATION

No formal requirements or informal provisions.

ENFORCEMENT

Liability

South Carolina employs strict and joint and several liability. Statue explicitly adopts CERCLA §107 and implicitly CERCLA in toto. To date, South Carolina has only sought negotiated agreements. State requires Department to exhaust RP and Federal funds before using its own. DHEC procedure is to serve RPs notices with deadlines and to inform EPA at the same time. South Carolina can levy civil penalties of $25,000/day with stipulated penalties for non-compliance with a consent agreement of $1,000/day. Treble damages.

Natural Resource Damages

No program.

Property Transfer

HWMA requires that property that has been used as a strategic disposal facility must record this on the deed.

FEDERAL/STATE PARTNERSHIPS

South Carolina has a SMOA, a CPCA and SSCAs with U.S. EPA.

TENNESSEE

SITES

NPL Sites		State Sites	
Final:	14	Known and Suspected:	1142
Proposed:	1	Identified as Needing Attention:	157
Deleted:	1	On Inventory or Priority List:	157

STATUTORY AUTHORITIES

The *Hazardous Waste Management Act of 1983* (as amended 1986, 1988, 1989, 1990, and 1991), Part II, TCA §68-212-201 et seq., establishes a State superfund program, authorizes the Hazardous Waste Remedial Action Fund, provides authority to take or compel remedial actions, establishes a priority list and requires notice to register deeds for any site listed.

PROGRAM ORGANIZATION AND FUNDING

The Tennessee Department of Environment and Conservation (DEC), Division of Superfund (created 1/86) has five regional offices with a total of 49 full-time staff. Legal support is provided by 1.5 attorneys in DEC and one half-time attorney in the AG's office.

Staff and administrative costs are funded from the Hazardous Remedial Action Fund, Federal grants and fees assessed on hazardous waste generators, treaters, and shippers.

CLEANUP ACTIVITIES

Remediation is currently underway at 2 NPL and 5 non-NPL sites. 53 non-NPL sites have been fully remediated since the start of the State cleanup program. 4 remedial actions were completed and 5 are underway at non-NPL sites during the last fiscal year, which ended 6/30/93. Removals are currently underway at 6 non-NPL sites. Approximately 50 removals have been completed since the start of the program with 10 removals completed during FY93.

CLEANUP FUNDING

The Hazardous Waste Remedial Action Fund had a balance of $6.26M at the end of FY93. $2.47M was added to the fund in FY93. Expenditures for NPL sites totaled $5K. Expenditures at non-NPL sites totaled $2.22M. A total of $250K was obligated at non-NPL sites.

Significant sources of fund monies include appropriations and fees on transporters and generators. Cost recovery, interest, and penalties are minor fund sources.

The Fund may be used for program administration, emergency response, site investigation, removals, remediation, studies and design, O&M, and CERCLA match.

CLEANUP POLICIES AND CRITERIA

The State has no statutory cleanup standards. MCL or other federal standards and EPA guidelines are applied if available. If no standard is available, background levels or levels derived from EPA health risk assessment guidance are used. Risk levels of 10^{-4} to 10^{-6} are applied on a case-by-case basis depending on the media, the contaminant, and the population and/or the ecology at risk of exposure.

PUBLIC PARTICIPATION

A public meeting is required at the end of the RI/FS stage for input in the development of the ROD. Rulemaking hearings must be held prior to any site(s) being added or deleted from the State site priority list.

ENFORCEMENT

Liability

The state statute provides for joint and proportional liability and requires each liable party to pay an equitable portion taking various factors into consideration. The state AG is responsible for apportioning liability. Strict, joint, and several liability applies for compliance with state orders for remedial actions.

The Commissioner of DEC is authorized to issue orders for site information, access and remedial response, assess civil penalties up to $10,000/day per violation, and impose punitive damages of up to 150% of the State's costs.

Natural Resource Damages

The State policy, established in 1980, provides for the Commissioner of TDEC to take action to assess damages with the assistance of other State departments. Currently, the State DOE-Oversight Division is working with other trustees to assess damages and releases from the Oak Ridge Reservation. No damages have been recovered to date, and there are no claims pending.

Property Transfer

TCA 68-212-209 requires disclosure on the property deed or with the recorder of deeds that the site was or is being used for disposal of hazardous substances. The State maintains a database of properties known to be contaminated and property sites on record as such.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

REGION V

Illinois
Indiana
Michigan
Minnesota
Ohio
Wisconsin

ILLINOIS

SITES

NPL Sites		State Sites	
Final:	31	Known and Suspected:	1400
Proposed:	1	Identified as Needing Attention:	147
Deleted:	2	On Inventory or Priority List:	*No List*

STATUTORY AUTHORITIES

The *Environmental Protection Act* (1970, amended every year from 1983-1993), established the Hazardous Waste Fund and provides for enforcement, cost recovery, and punitive damages.

The *Responsible Property Transfer Act*, Public Act §86-679 (1988), mandates environmental disclosures by transferors.

PROGRAM ORGANIZATION AND FUNDING

The Remedial Project Management Section in the Bureau of Land, Illinois Environmental Protection Agency, has 91 FTE staff. Legal support is provided by 3 FTE attorneys in the IEPA Division of Legal Counsel with additional assistance available from the Attorney General's Office. Staff and administration funding is 83% supported by Federal grants, with 7% from the State's general fund and 10% from other sources.

CLEANUP ACTIVITIES

Remedial actions are underway at 82 non-NPL sites; 122 have been completed since the start of the program, including 17 in fiscal year 1993 (7/1/92-6/30/93). Removals are underway at 59 non-NPL sites; 350 have been completed since the start of the program, including 16 in FY93. Of the non-NPL sites, a substantial number of the remedial actions and removals have been conducted under Illinois' voluntary cleanup program. In December 1992, an Illinois court voided the State's Remedial Action Priority List.

At NPL sites there are 7 remedial actions underway; 6 sites have completed remedial action. Two removal actions are underway at NPL sites; 12 have been completed. One remedial action and 1 removal at NPL sites were completed in FY93.

CLEANUP FUNDING

The Illinois Hazardous Waste Fund had a balance of $6M at the end of the fiscal year (6/30/93). It received income of $8.47M during FY93, primarily from the fees collected for transport and disposal of hazardous wastes, but also from penalties and cost recoveries. Expenditures were $5.95M; and $10.75M was obligated. Funds were used for site investigation, studies and design, emergency response, removals, remedial actions, CERCLA match, O&M, program administration, and other purposes.

CLEANUP POLICIES AND CRITERIA

Water quality criteria, MCLs and MCLGs, and Illinois groundwater quality standards are applied to determine cleanup levels. Only cleanup of groundwater contamination is covered by regulation; the other cleanup standards are applied by policy. Cleanup levels are based on the protection of groundwater, using promulgated State standards as well as

health advisories and/or MCLs. If necessary, cleanup objectives may be based on the protection of human health from other exposures as well as groundwater. Cleanup objectives are set by a technical committee and are evaluated by an administrative management committee, which makes the final recommendation. An ARARs manual has been published by the state. Risk-based cleanup goals may be proposed by responsible parties. The State views risks of 10^{-4} as unacceptable and further remediation is required. Risks between 10^{-4} - 10^{-6} are evaluated on a site specific basis.

PUBLIC PARTICIPATION

At NPL sites, NCP rules apply and the required public meeting is conducted as a formal public hearing with a court reporter and transcript. By policy, community relations coordinators are assigned to sites; coordinators emphasize direct contact in small groups, or one-to-one communication.

ENFORCEMENT

Liability

Liability is strict, joint and several. Civil penalties for violations of the Act are authorized up to $50K for the first day of violation, and $10K for each subsequent day of violation. Treble damages are available.

Natural Resource Damages

Programs commenced in 1993. No recoveries to date; 4 pending claims.

Property Transfer

The Illinois Responsible Property Transfer Act mandates environmental disclosures by transferors.

FEDERAL/STATE PARTNERSHIPS

Illinois has a SMOA, a CPCA, and SSCAs with the U.S. EPA.

INDIANA

SITES

NPL Sites		State Sites	
Final:	36	Known and Suspected:	1549
Proposed:	1	Identified as Needing Attention:	82
Deleted:	5	On Inventory or Priority List:	60

STATUTORY AUTHORITIES

The *Hazardous Waste Act*, *Environmental Management Act*, *Hazardous Waste Land Disposal Tax Act*, *Hazardous Substance Response Trust Fund Act*, Indiana Code §13-7 Chapter 8.7-1, *et seq.*, (1981, as amended 1984, 1985, 1987, 1988, 1989 and 1991); Ind. Code §§13-7-12-1 to -3; and Ind. Code §§6-6-6.6-1 - 3, together establish a cleanup fund and authorize enforcement actions.

The *Responsible Property Transfer Law*, Ind. Code §13-7-22.5 (1990), provides for full environmental disclosures for transfers of real property which is listed on CERCLIS, subject to SARA Title III, or which contains a regulated underground storage tank.

PROGRAM ORGANIZATION AND FUNDING

The Project Management Branch in the Office of Environmental Response, Indiana Department of Environmental Management has 21 FTE staff (34 are authorized). Legal support is provided by 6 attorneys in the IDEM Office of Legal Counsel; the Attorney General's Office provides 1 FTE attorney. Staffing and administration are funded 75% from the State general fund, 5% from cleanup funds, and 20% from Federal grants.

CLEANUP ACTIVITIES

Remedial actions are underway at 8 of the non-NPL State sites. No remedial actions have been completed since the start of the program. Twenty five removals are underway at non-NPL sites. Eighteen removals have been completed since the start of the program, including 5 during fiscal year 1993 (7/1/92-6/30/93).

Remedial actions are underway at 15 NPL sites; 2 have been completed since the start of the program. Three removals are underway at NPL sites; 18 have been completed since the start of the program. One removal was completed in FY93.

CLEANUP FUNDING

The Hazardous Substances Response Trust Fund is funded by taxes, penalties, cost recovery, punitive damages, interest, and appropriations. Taxes are the most significant source of funds. The Fund had a balance of $9.8M at 6/30/93, the close of the fiscal year. Income to the Fund was $2.5M during the fiscal year. Expenditures were $3.1M ($3M of which was for non-NPL sites) and $8.5M was obligated ($5.8M for non-NPL sites). The Fund may be used for site investigation, emergency response, removals, studies and design, remedial actions, O&M, and CERCLA match.

CLEANUP POLICIES AND CRITERIA

Water quality criteria, MCLs and MCLGs, and EPA guidelines are applied where appropriate. Indiana interim groundwater standards require the application of MCLs where an aquifer is or may be a source of public drinking water. The State uses risk assessment on a site-specific basis, with guidance specifying risk levels between 10^{-4} - 10^{-8}.

PUBLIC PARTICIPATION

On State-funded cleanups, State's policy is to follow CERCLA guidance. The voluntary remediation program requires a public comment period before the Commissioner can approve a proposed work plan.

ENFORCEMENT

Liability

Liability is strict, joint and several. Civil penalties are authorized up to $25,000 per day per violation, and treble damages are available.

Natural Resource Damages

The State's natural resource damages program commenced in 1988 and has recovered $2.7M. There are 5 claims currently pending, seeking $2.5M. IDEM cooperates with the Department of Natural Resources to perform pre-assessment screens and damage investigations.

Property Transfer

Indiana law requires site examination and disclosure by the transferor of releases and other relevant conditions on sites subject to the Responsible Property Transfer Law, effective 1/1/90.

FEDERAL/STATE PARTNERSHIPS

Indiana has a SMOA, a CPCA, and SSCAs with the U.S. EPA.

MICHIGAN

SITES

NPL Sites		State Sites	
Final:	78	Known and Suspected:	9,785
Proposed:	4	Identified as Needing Attention:	9,785
Deleted:	2	On Inventory or Priority List:	9,785

STATUTORY AUTHORITIES

The Michigan *Environmental Response Act* (MERA or Act 307), Mich. Comp. Laws Ann. §§299.601 *et seq.* (1982, as amended 1984, 1990), authorizes the Department of Natural Resources to clean up contaminated sites. The 1990 amendment provides the State with enforcement, liability, and cost recovery capabilities and provides for citizen suits and restrictions on property transfers.

PROGRAM ORGANIZATION AND FUNDING

The Environmental Response Division in the Department of Natural Resources has responsibility for cleanup activities. It employs 381 staff. The MERA program has 111 staff (116 authorized); the Environmental Cleanup Bond Program has 82 staff (85 authorized); Federal Superfund support has 39 staff (41 authorized); and LUST has 35 staff as authorized. The remainder are associated with enforcement staff, laboratories, management, contracting, and administration. The Attorney General's Office provides legal support with 7 FTE attorneys. Funding for staff and administration comes 50% from the State's cleanup fund, 35% from the State's general fund, and 15% from Federal grants.

CLEANUP ACTIVITIES

The State has 2,600 remedial actions underway at non-NPL sites. Prior to last year it had completed 11 remedial actions, with 23 completed last year. Removals are underway at 104 sites, with 373 completed since the start of the program including 148 last fiscal year. These figures exclude actions at LUST sites.

Remedial actions are underway at 60 NPL sites; 2 sites have been fully remediated since the start of the program, 1 during FY93. Twenty removals were completed at NPL sites last year.

CLEANUP FUNDING

The Environmental Protection Bond Fund had a balance of $8.4M at the end of the fiscal year (6/30/93), with additions of $55.3M, expenditures of $21.3M, and obligations of $25.6M during the year, all for non-NPL cleanups. The Fund relies primarily on the sale of bonds, with cost recoveries and penalties providing some funds. The Bond Fund can be used for site investigation, emergency response, removals, studies and design, remedial actions, CERCLA match, O&M, natural resource restoration, program administration, and grants to local governments.

The Act 307 fund had a balance of $9.8M at the end of FY93, with FY93 appropriations of $22.9M, of which $7.9M was spent on non-NPL cleanup activities. In addition, the DNR obligated $5M for non-NPL cleanups from these funds. Act 307 funds may be used for site investigations, emergency response, removals, studies and design, remedial actions, O&M, CERCLA match, and program administration.

The State's "superfund" is funded solely by appropriations, which totaled $656K in FY93, all of which was spent, leaving a balance of $0 at the end of FY93. These funds are used for site investigations and hazardous waste research at universities.

CLEANUP POLICIES AND CRITERIA

The State has promulgated hazardous site remedial standards, and also uses water quality criteria, MCLs and MCLGs, background levels, risk assessment, and EPA Guidelines. The promulgated standards are numerical concentrations for identified contaminants. A risk level of 10^{-6} was used to develop the standards. The State uses a three-tiered scheme for cleanup. Type A sites are cleaned up to background, or detection limits. Type B sites use risk-based cleanup standards (usually the promulgated standards) consistent with a presumed residential land use. Type C sites use cleanup criteria based upon site-specific evaluation of risk exposures consistent with restricted uses of the site.

PUBLIC PARTICIPATION

A public hearing is required when the State list is updated. Public hearings also occur during the remedy selection process; the State models its system on CERCLA.

ENFORCEMENT

Liability

Liability is strict, joint and several. Civil penalties are authorized up to $1K per day for failure to comply with a written request of the director to undertake a response activity; penalties are up to $25K/day for violation of a judicial cleanup order. Treble damages are available.

Natural Resource Damages

The State has a natural resource damages program, started in 1990. The program has recovered $3.84M in damages.

Property Transfer

MERA affects property transfers, in that if a transferor does not disclose contamination, it will lose a defense to liability. Super liens are not provided for in the law, but the State has requested a court to impose them in individual cases.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA, a CPCA and SSCAs with U.S. EPA.

MINNESOTA

SITES

NPL Sites		State Sites	
Final:	42	Known and Suspected:	542
Proposed:	1	Identified as Needing Attention:	184
Deleted:	0	On Inventory or Priority List:	184

STATUTORY AUTHORITIES

The *Minnesota Environmental Response & Liability Act* (MERLA), Minn., Stat. §§115B.01 - .24 (1983, as amended 1984, 1985, 1986, 1987, 1990, 1992 and 1993), establishes the State Fund and provides for strict, joint and several liability, injunctive relief, civil penalties, cost recovery, and citizen suits. The 1991 amendment clarifies that lenders are not liable solely because they are owner or because they have a capacity to influence an operation. The Hazardous Substance Injury Compensation Fund §§115B.25 - .37, is available for victim compensation. The 1992 Amendment requires disclosure before transfer, and a record in the deed.

PROGRAM ORGANIZATION AND FUNDING

Minnesota Pollution Control Agency (MPCA), Ground Water and Solid Waste Division has three sections dealing with Superfund with a total of 110 FTE staff. The Site Response Section is primarily responsible and handles hazardous waste sites. The Program Development Section handles preliminary assessment and listing, and the Solid Waste Section handles sanitary landfills. Legal support is from attorneys in the Attorney General's Office who work full-time for the State program. Funding comes from the States' cleanup fund (60%) and from Federal grants (40%).

CLEANUP ACTIVITIES

At non-NPL sites, Minnesota has completed 46 remedial actions since the start of the program, 20 in fiscal year 1993 (7/1/92-6/30/93), and 137 remedial actions are currently underway. Minnesota has completed 200 removals, 92 in FY93, and 2 are underway.

At NPL sites 11 remedial actions are currently underway. Remedial actions have been completed at 14 sites since the start of the program, 10 of these in FY93. Two removals have been completed since the start of the program.

CLEANUP FUNDING

The MERLA fund balance was $5.25M at the end of fiscal year 1993. An average of $4.3M/yr is collected through appropriations, cost recovery and penalties/fees, waste end taxes, and interest. The Fund paid out $7M in FY93, $6.9M of it for non-NPL sites, and obligated $1.46M in FY93, all for non-NPL sites. The Fund may be used for remedial actions, site investigation, studies and design, removals, emergency response, program administration, natural resource restoration, O&M, and CERCLA match. MPCA must obtain Pollution Control Board approval (Determination of Inadequate Response) before expending funds. MPCA must seek RP or Federal funding before using State funds. Victim compensation is available from the Hazardous Substance Injury Compensation Fund.

CLEANUP POLICIES AND CRITERIA

Cleanup decisions are made on a case-by-case basis using criteria similar to the NCP. The MPCA seeks a permanent cleanup and uses ARARs. A 10-5 cancer risk factor, or Hazardous Quotient <0.2 for individual non-carcinogen contaminants or <1.0 for multiple contaminants are used in the absence of applicable standards. Other criteria applied include recommended allowable limits (RALs) for drinking water contaminants, State groundwater cleanup levels, water quality criteria, MCLs/MCLGs, and EPA guidelines. Most restrictive criteria are applicable at each site.

PUBLIC PARTICIPATION

Entire process is public with notification of RPs and approval of all State actions at a public meeting of the Pollution Control Agency Board. As a matter of policy, a public relations officer is assigned to each site and MPCA conducts public meetings after completion of the RI/FS to explain the proposed plan.

ENFORCEMENT

Liability

Minnesota has strict and joint and several liability. State can collect up to $20K/day if a party fails to make sufficient response action. No punitive damages are available. MERLA requires the State to seek RP cleanups prior to use of MERLA Fund. All cost recovery and penalties/fines are returned to the MERLA Fund. MERLA requires RPs to conduct MPCA-requested response actions.

Natural Resource Damages

No program at this time. The State has hired ecologists and is considering its approach. The MERLA Fund can be used for natural resource damage restoration.

Property Transfer

Minnesota requires disclosure before transfer and a record on the deed.

FEDERAL/STATE PARTNERSHIP

Minnesota has a SMOA, a CPCA and SSCAs with U.S. EPA.

OHIO

SITES

NPL Sites		State Sites	
Final:	34	Known and Suspected:	1200
Proposed:	2	Identified as Needing Attention:	771
Deleted:	0	On Inventory or Priority List:	100

STATUTORY AUTHORITIES

The *Solid and Hazardous Waste Disposal Law*, Ohio Rev. Code §3734.01 - .9 (1980, as amended 1988), contains provisions for two cleanup Funds, enforcement authorities and citizen suits.

PROGRAM ORGANIZATION AND FUNDING

The Division of Emergency and Remedial Response in the Ohio Environmental Protection Agency (OEPA) administers the cleanup program. The program employs 107 FTE staff and receives its funding from State cleanup funds, Federal grants and solid waste disposal fees. The Attorney General's Office supplies 3 attorneys.

CLEANUP ACTIVITIES

At non-NPL sites, Ohio has completed 1 remedial action since the start of the program and has 16 currently underway. The State has completed 21 removals since the start of the program, 15 in fiscal year 1993 (7/1/92-6/30/93), and has 20 more underway.

At NPL sites, 15 remedial actions are underway. 5 remedial actions have been completed since the start of the program, 1 in FY93. 17 removals are underway, and 37 have been completed since the start of the program. 8 NPL removals were completed in FY93.

CLEANUP FUNDING

Ohio has two Funds available for cleanups. The Hazardous Waste Cleanup Fund has a balance of $13.26M (6/93). A total of $10.24M was added in fiscal year 1993. Approximately 20% of this total was obtained from cost recovery and 80% from appropriations. The Fund paid out $8.84M during FY93 and obligated an additional $761K. The Fund is used for day-to-day activities. The Fund may also be used to build additional hazardous waste facilities and to buy sites. The Hazardous Waste Facility Management Fund has a balance of $21.45M. $10.13M was added in FY93 from fees, appropriations and penalties. Recovered costs may return to the Fund. This Fund paid out $11.17M and obligated an additional $952K during 1993. This Fund is used for CERCLA 10% matching funds, State level-of-effort contracts and non-investigatory emergency response actions.

CLEANUP POLICIES AND CRITERIA

Ohio uses MCL wherever possible. Otherwise the State uses risk assessments, water quality criteria, background, and EPA guidelines. Cumulative carcinogenic risk must be reduced to 10^{-4} to 10^{-6}, where 10^{-6} is the point of departure. The State also conducts ecological risk assessments. Cleanup criteria are also based on best available treatment technology. The State has a "How Clean is Clean" policy which is a cleanup to risk-based levels or background.

PUBLIC PARTICIPATION

There is limited statutory authority; general rules in the Ohio Administrative Code apply. The current policy is to be consistent with NCP, and requires a public comment period, responsiveness summary, public meetings, and establishment of an information reporting system.

ENFORCEMENT

Liability

The statute is silent on the liability standards; OEPA has argued for strict, joint and several liability. The statute authorizes judicial search warrants for site access, administrative orders, injunctive actions, civil penalties, cost recovery, liens, criminal penalties in limited circumstances, and citizen suits. Civil penalties up to $10K/day are available, but there is no provision for punitive damages. The State is prohibited from taking action if U.S. EPA is pursuing a claim. The State must attempt to reach a consent agreement with an owner/operator before OEPA may do the work. Ohio does not mix State and federal claims. Ohio prefers to use CERCLA §107 for cost recovery.

Natural Resource Damages

Since 1990, the State has recovered $200K.

Property Transfer

No law.

FEDERAL/STATE PARTNERSHIPS

Ohio has a SMOA, a CPCA, and SSCAs with U.S. EPA.

WISCONSIN

SITES

NPL Sites		State Sites	
Final:	39	Known and Suspected:	4,000
Proposed:	1	Identified as Needing Attention:	565
Deleted:	1	On Inventory or Priority List:	565

STATUTORY AUTHORITIES

The *Environmental Repair Statue*, Wis. Stat. § 144.442 (1987) creates the Environmental Fund (EF), requires a State ranking system and authorizes DNR to take emergency and remedial actions, recover costs, and obtain RP lead cleanups.

The *Abandoned Containers Statute*, Wis. Stat. §144.77 (1983), authorizes the DNR to use money appropriated for the EF to remove and dispose of abandoned containers that have hazardous substances.

The *Hazardous Substance Spill Statue*, Wis. Stat. §144.76, (1978) authorizes the DNR to use money appropriated for the EF to respond to discharges of hazardous substances; requires development of a contingency plan.

PROGRAM ORGANIZATION AND FUNDING

Within the Department of Natural Resources, the Emergency and Remedial Response program has 97 full-time staff and deals with Federal Superfund, State response and State tank programs.

Legal support comes from 3 full-time attorneys in the DNR's Bureau of Legal Services and on a case-by-case basis from the Attorney General's Office. Funding comes from Federal grants and the State cleanup fund.

CLEANUP ACTIVITIES

Wisconsin has 120-150 remedial actions underway at non-NPL sites. State has completed 80-100 remedial actions at non-NPL sites since its start of the program. Twenty remedial actions were completed during fiscal year 1993 (7/1/92-6/30/93), 90 since the start of the program. Twelve removals are currently underway at non-NPL sites. Four hundred removals have been completed since the start of the program, 10 in FY93.

Remedial actions are underway at 39 NPL sites. Twenty removals have been completed at NPL sites since the start of the program, and 2 are currently in progress.

CLEANUP FUNDING

The Environmental Fund (EF) had a balance of $3.53M at the end of FY93. The EF added $4.11M during FY93 from appropriations, fees, cost, recoveries, interest, penalties, private funds and taxes. EF may be used for emergency response, site investigation, removals, O&M, CERCLA match, studies and designs, remedial action, natural resource restoration program administration, and to a limited extent, for grants to local governments. Remedial action may be subject to prior administrative hearing and judicial review. EF paid out $3.13M in FY93. Additionally, $3.21M was obligated in FY93, $189K of which was for O&M match for NPL sites.

There is also $20.5M in bonding available which may be used for CERCLA match and for cleanup actions taken under the authority of the Environmental Repair Statute, which from a practical application point of view is only for landfill-type cleanups. In FY93, $1.95M was paid out from the bonding authority.

CLEANUP POLICIES AND CRITERIA

Wisconsin uses water quality criteria, MCLs/MCLGs and background levels.

State promulgated groundwater standards are in place. Draft promulgated soil standards are being considered and should be in effect in approximately 6 months. The State response process for identifying, investigating, building remedies and closing out cases should be effective by March, 1994.

PUBLIC PARTICIPATION

State list is subject to public notice, a 30-day comment period and hearing requirements. Remedial actions are subject to public notice, and a public hearing if requested within 30 days. There have been no formal challenges by the public to State-funded RAs. All files are open to the public with limited confidentiality and enforcement exceptions.

ENFORCEMENT

Liability

Wisconsin has strict, joint and several liability under the Abandoned Container and Spill Laws but under the Environmental Repair Statute the standard is explicitly not strict (it is joint and several). The burden of proof is on the State. Civil penalties of up to $5,000/day are available, but there are no punitive damages.

Natural Resource Damages

No formal program. State addresses natural resource damages are handled on an ad hoc basis.

Property Transfer

No program, but there is currently a legislative proposal action pending.

FEDERAL/STATE PARTNERSHIPS

Wisconsin has a CPCA and SSCAs with U.S. EPA.

REGION VI

Arkansas
Louisiana
New Mexico
Oklahoma
Texas

ARKANSAS

SITES

NPL Sites		State Sites	
Final:	10	Known and Suspected:	351
Proposed:	0	Identified as Needing Attention:	101
Deleted:	1	On Inventory or Priority List:	7

STATUTORY AUTHORITIES

The *Remedial Action Trust Fund Act* (RATFA), Ark. Code Ann. §§8-7-501 *et seq.* (1985, as amended 1987), establishes the Hazardous Substance Remedial Action Trust (HSRAT) Fund, which replaced the Hazardous Substance Response Trust Fund (enacted in 1983). RATFA also establishes a state priority list of hazardous waste sites.

The *Emergency Response Fund Act* (ERFA), Ark. Code Ann. §§8-7-401 *et seq.* (1985), establishes the Emergency Response Fund (ERF). Both RATFA and ERFA provide for proportional liability, civil and criminal penalties, treble damages, cost recovery, and superlien authority.

PROGRAM ORGANIZATION AND FUNDING

The Superfund Branch of the Hazardous Waste Division is located in the Department of Pollution Control and Ecology. The Branch is staffed by two employees, with legal support available upon request from Department attorneys. The program receives funding from the State's HSRAT fund and from Federal grants.

CLEANUP ACTIVITIES

Arkansas has 2 remedial actions now underway at NPL sites, and 1 removal underway at an NPL site.

CLEANUP FUNDING

The HSRAT Fund, with a balance of $6.1M as of 6/30/93, is derived primarily from annual fees (approximately $600K/year) on hazardous waste generators within Arkansas or those accepting waste generated outside the State for transport/storage/disposal. The HSRAT Fund also receives significant revenues from penalties, and smaller amounts of funding through appropriations, cost recoveries, interest and the Emergency Response Fund. During FY93 $1.57M was added to the HSRAT Fund, and $1.34M was paid out, all for NPL sites; no further obligations have been made. The HSRAT Fund can be used for site investigations, studies and design, emergency responses, removals, and remedial actions at State-listed sites, and for CERCLA match, but it cannot duplicate CERCLA. Funded sites must be on the State Priority List. Ten percent of the HSRAT revenues are deposited into the Environmental Education Fund. It can also be used for program administration.

The ERF had a balance of $139K as of 6/30/93, with additions of $129K during FY93. The ERF can be used only for emergency responses, removals, and site investigations. It is funded by civil penalties and is capped at $150K; funds accruing above this level are deposited in the HSRAT Fund. From the ERF, $121K was paid for non-NPL sites and $1.5K has been obligated for non-NPL sites during FY93.

CLEANUP POLICIES AND CRITERIA

Waste cleanup standards in DPC&E Regulation No. 23, plus State air and water quality regulations, MCLs/MCGLs, risk assessments, EPA guidelines and background levels are all used by Arkansas as standards for hazardous waste cleanups.

PUBLIC PARTICIPATION

A public hearing is held prior to decisions to add or delete sites from the State priority list. Transcripts of public hearings and comments received on sites become part of administrative records. Public meetings and/or fact sheets are provided prior to major milestones on cleanup projects.

ENFORCEMENT

Liability

Both RAFTA and ERFA provide for strict, joint and several liability unless proportional liability is proved by a preponderance of the evidence. RATFA provides State authority to issue administrative orders for information, site access, and remediation. Although injunctive action is not expressly provided for, Arkansas may proceed under its RCRA-type law. RATFA authorizes civil penalties of up to $25K/day and criminal penalties for violating the Act, making false statements, or violating an order. RATFA also provides for treble punitive damages, cost recovery, and superliens. ERFA also provides for administrative orders, treble damages, civil and criminal penalties, cost recovery and superliens. Action by the legislature in the 1990 legislative session impedes use of the superlien provisions which, however, were not repealed.

Natural Resource Damages

Arkansas' NRD program was just started in November, 1993, by the signing of a memorandum of understanding with the U.S. Dept. of Interior. No amount has yet been determined for the value of the State's 1 pending claim.

Property Transfer

No provision.

FEDERAL/STATE PARTNERSHIPS

Arkansas has a CPCA and SSCAs with U.S. EPA in place for FY93.

LOUISIANA

SITES

NPL Sites		State Sites	
Final:	12	Known and Suspected:	1014
Proposed:	0	Identified as Needing Attention:	184
Deleted:	0	On Inventory:	1287

STATUTORY AUTHORITIES

The Hazardous Waste Control Law (La. Rev. Stat. Am. Title 30, §§2171-2206), the *Inactive and Abandoned Hazardous Waste Site Law* (La. Rev. State §§2221-2226), and Chapter 12 entitled *Liability for Hazardous Substance Remedial Action* (La. Rev. Stat. Am. §§2271-2280), together establish several funds and provide strict, joint and several liability, information-gathering, administrative order authority, injunctive relief, cost recovery, liens, citizen suits, restrictions on property transfers, and treble damages. Site access, restrictions on property transfers, and civil and criminal penalties are provided by the *Environmental Quality Law's* general enforcement provisions, La. Rev. Stat. Title 30.

PROGRAM ORGANIZATION AND FUNDING

The Inactive and Abandoned Sites Division in the Department of Environmental Quality's (DEQ's) Office of Legal Affairs and Enforcement is the lead agency. The Division has 43 of its 45 authorized positions currently filled. One DEQ lawyer provides enforcement support. About 50% of the Division's $2.9M budget is federally funded. The remaining 50% comes from the State's general fund.

CLEANUP ACTIVITIES

At NPL sites, Louisiana has 11 remedial actions (RAs) underway, and 1 RA completed during the last fiscal year. It has no removals underway at NPL sites, but 1 was completed during the last fiscal year (7/1/92-6/30/93), and 7 have been completed since the program started. At non-NPL sites, it has 75 RAs underway, 20 completed in the last fiscal year, and 27 completed since the start of the program. Nine removals are underway at non-NPL sites. Twenty-two removals have been completed at non-NPL sites since the start of the program, 8 of those during the last fiscal year.

CLEANUP FUNDING

The primary cleanup fund is the Hazardous Waste Site Cleanup Fund (HWSCF). The HWSCF's balance was $3M as of 10/93. A portion of the taxes on hazardous waste generation, as well as sums recovered through judgments and settlements, are the sources of the HWSCF. Appropriations from general outlay are made only for specific capital expenditures for cleanups. The HWSCF can be used for emergency responses, removals and remedial actions, studies and design, and O&M. DEQ must demand payment from PRPs once the work is done. During FY93, $943K was added to the HWSCF, and all of that was expended for non-NPL sites during FY93. An additional $1.9M has been obligated for non-NPL sites. For CERCLA match, Louisiana uses capital outlay.

CLEANUP POLICIES AND CRITERIA

DEQ is required to select remedies, based on cost effectiveness, that reduce exposure or potential exposure so as not to pose any significant threat to public health or the environment. On a site-specific basis, DEQ selects cleanup levels using water quality criteria, MCLs/MCLGs, background levels, risk assessments and EPA procedures and guidance and aims for permanent remedies. Risk levels range from 10^{-4} to 10^{-6}.

PUBLIC PARTICIPATION

La. Rev. Stat. §2280 requires an opportunity for a public meeting and, if requested, a public comment period prior to approval of an RI plan and selection of a remedy. A public comment period is required for closure plans when DEQ proposes to treat, store, or dispose of hazardous wastes at abandoned sites. At complex sites, DEQ institutes community relations programs that include regular public meetings and fact sheets. Prior to concluding settlement agreements, DEQ makes them available to the public and holds public meetings.

ENFORCEMENT

Liability

The State has administrative order and injunctive authority, costs recovery, liens, treble damages, and has strict, joint and several liability. Parties may prove proportionality, however. Civil penalties of $25K/day can be recovered for each day that a PRP does not provide requested information. Double damages can be recovered by participating PRPs from non-participants, and the state can recover treble damages from non-participants if the State cleans up. Louisiana will negotiate a settlement with PRPs or issue a remedial demand order wherever possible.

Natural Resource Damages

Louisiana does not have a natural resource damages program.

Property Transfer

Louisiana can impose a superlien and has a statutory requirement that sites be recorded on deeds. Disclosure of sites and examinations of sites prior to transfer are not formally required but are implied by court precedent. The state maintains a database of sites.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA, CPCAs and SSCAs with U.S. EPA.

NEW MEXICO

SITES

NPL Sites		State Sites	
Final:	10	Known and Suspected:	600
Proposed:	2	Identified as Needing Attention:	220
Deleted:	1	On Inventory or Priority List:	410

STATUTORY AUTHORITIES

The Hazardous Waste Act, N.M. Stat. Ann. 74-4-1 to 74-4-13 (1988, as amended 1989 and 1991) establishes the Hazardous Waste Emergency Fund for emergency response and removals, the State CERCLA match, and certain enforcement authorities.

The Water Quality Act, N.M. Stat. Ann. 74-6-1 *et seq.* (1993) provides additional enforcement authorities.

PROGRAM ORGANIZATION AND FUNDING

Within the Environment Department (NMED), the Superfund Section of the Groundwater Protection and Remediation Bureau has 30 staff. The NMED General Counsel's office provides legal support with ten attorneys. Approximately 1.5 FTE of legal staff work on hazardous waste cases. The New Mexico program is funded by general appropriations and federal grants.

CLEANUP ACTIVITIES

At NPL sites, New Mexico has 6 remedial actions (RAs) underway, 1 completed in the last fiscal year (6/30/93) and 1 completed since the start of the program. At non-NPL sites, New Mexico has 13 RAs underway, 20 completed during the last fiscal year, and 50 completed since the start of the program. For removals at non-NPL sites, New Mexico has 16 underway, 10 completed during the last fiscal year, and 45 completed since the program started.

CLEANUP FUNDING

The Hazardous Waste Emergency Fund (Emergency Fund) is funded by appropriations and cost recoveries. The Emergency Fund had a balance of $15K as of 11/1/93, with additions of $21K during the past fiscal year. Approximately $20K was spent on non-NPL sites during the past fiscal year. The Emergency Fund can be used for emergency responses and the state's CERCLA match.

The State Groundwater Remediation Fund (SRF) is funded entirely by appropriations. The SRF had a balance of $55K as of 6/30/93, with additions of $210K during the past fiscal year, and $154K was paid out of the SRF during the past fiscal year. The SRF can be used only for program administration.

The Potential Responsible Party Program (PRPP) Fund receives mostly private funds for oversight of voluntary cleanups, plus some penalties. It had a balance of $33K as of June 30, 1993, with additions of $55K and expenditures of $22K during the past fiscal year. The PRPP Fund can be used only for State oversight of private investigations and remediations at sites for which PRPs have paid into the Fund, and expenditures cannot exceed what has been paid for each site.

CLEANUP POLICIES AND CRITERIA

The State uses background levels, EPA guidelines, risk assessments, State surface water and groundwater standards, water quality criteria, MCLs, and soil remediation guidelines to establish cleanup levels. The State uses an additional lifetime cancer risk level of 10^{-6} in its risk assessments.

PUBLIC PARTICIPATION

The State follows CERCLA/NCP procedures at NPL sites. At non-NPL sites, it follows the regulations of the Water Quality Control Commission.

ENFORCEMENT

Liability

Enforcement authorities include orders for site access and information, administrative and consent order authority, injunctive actions, civil penalties and cost recovery authority. No punitive damages are available. Statutory standard is "persons responsible for hazardous waste cleanup," interpreted as joint and several liability. The preferred enforcement method is sending a notice of violations with a time period for compliance and a proposed penalty or seeking an injunction.

Natural Resource Damages

New Mexico's NRD program began in July 1993 and has 1 claim currently pending. It has 4 staff and funding for 3 years. More claims are expected to be filed within the next six months.

Property Transfer

New Mexico has no law governing transfers of hazardous waste sites, but it does maintain a database of priority sites which may be available to the public beginning in January 1994.

FEDERAL/STATE PARTNERSHIPS

For FY93, New Mexico had a SMOA, a CPCA and SSCAs with U.S. EPA.

OKLAHOMA

SITES

NPL Sites		State Sites	
Final:	10	Known and Suspected:	-
Proposed:	1	Identified as Needing Attention:	-
Deleted:	0	On Inventory or Priority List:	-

STATUTORY AUTHORITIES

The Environmental Quality Act, Okla. Stat. Ann. Tit. 27A, §2-1-101 through §2-11-503 (1993), establishes the Environmental Trust Revolving Fund (§2-3-403).

The Hazardous Waste Disposal Act, Okla. Stat. Ann. Tit. 63, §1-20-2001 through §1-20-2014, establishes a RCRA-type program.

The Hazardous Waste Fund Act, Okla. Stat. Ann. Tit. 63, §1-20-2015 *et seq.*, provides funding for the RCRA program and authorizes use of RCRA fund for hazardous waste emergencies.

PROGRAM ORGANIZATION AND FUNDING

The Department of Health's Solid Waste Management Service has 10 full-time employees. Legal support is provided by 1 Department of Health attorney. Sources of funding for program administration are the State general fund (15%), State cleanup funds (5%), and Federal grants (80%).

CLEANUP ACTIVITIES

Remedial actions are currently underway at 8 NPL and 6 non-NPL sites. Two remedial actions have been completed at NPL sites since the start of the cleanup program; no remedial actions have been completed at non-NPL sites. No removals are currently underway at NPL or non-NPL sites. Thirty-three removals have been completed at non-NPL sites since the start of the cleanup program, 8 during the last fiscal year (7/1/92-6/30/93).

CLEANUP FUNDING

The Hazardous Waste Fund, with a balance of $260K as of 6/30/93, is available for removals, emergency response, and CERCLA match. Its sources are appropriations and fees. Additions to the fund during FY93 totaled $200K. During FY93, $28K from the Fund were spent on cleanup activities.

The Environmental Trust Revolving Fund was established 7/1/93. No figure for its balance is yet available. Its primary source is a tax on motor and diesel fuels and blending materials, and it is authorized for use for CERCLA match. There have been no expenditures or obligations from the fund.

CLEANUP POLICIES AND CRITERIA

Cleanup levels are determined on a site-by-site basis based on risk calculations and State modeling. Oklahoma has issed guidance for water quality criteria and risk assessments, with a risk level of 10^{-6}, which are contaminant-specific.

PUBLIC PARTICIPATION

Oklahoma has no formal requirements or informal provisions for public participation.

ENFORCEMENT

Liability

Oklahoma does not have specified liability standards because it has no recovery/reimbursement procedures. Orders for site access are provided under general authorities granted to the Department of Health. The State has the authority to issue subpoenas, administrative orders and consent decrees under a general procedures law. The Hazardous Waste Disposal Act authorizes injunctive action and both civil and criminal penalties for RCRA-type hazardous waste violations.

Natural Resource Damages

Oklahoma's natural resource damages program is under development.

Property Transfer

Oklahoma has no property transfer provisions.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

TEXAS

SITES

NPL Sites		State Sites	
Final:	27	Known and Suspected:	1200
Proposed:	3	Identified as Needing Attention:	83
Deleted:	1	On Inventory or Priority List:	38

STATUTORY AUTHORITIES

The Hazardous Substances Spill Prevention and Control Act, Tex. Water Code §26.261 (as amended 1991), establishes the Spill Response Fund.

The Solid Waste Disposal Act, Tex. Health and Safety Code Ann. Art. §4477-7 (as amended 1991 and 1993), establishes the Hazardous Waste Disposal Fee Fund (Fund 550) and a priority list. A 1991 amendment changed the fee structure, placing fees on products containing hazardous materials. A 1993 amendment added a treble damages provision.

Texas relies on other statutes for certain authorities. The Texas Water Code §26.121 and §21.266 and Texas Administrative Code §335.4 and §335.8 provide general authority for voluntary cleanups. The Texas Health and Safety Code §361.184, §361.187, and §361.189 includes public participation provisions. The Texas Property Code, Ch. 5 includes property transfer provisions.

PROGRAM ORGANIZATION AND FUNDING

The Pollution Cleanup Division of the Texas Natural Resource Conservation Commission (TNRCC) has 102 full-time employees. Legal support is provided by 1 attorney in the TNRCC Legal Services Division. Funding for program administration is from State cleanup funds and from Federal grants.

CLEANUP ACTIVITIES

The State has screened approximately 800 sites for eligibility. Of those 800, 38 State sites have been ranked, and 45 are candidates for ranking. Approximately 1200 sites are awaiting screening.

Remedial actions are currently underway at 14 NPL sites. Seven remedial actions have been completed at NPL sites since the start of the cleanup program, 2 of these during FY93 (7/1/92-6/30/93). Although no remedial actions are currently underway at non-NPL sites, and there is no history of remedial actions at non-NPL sites, Texas is currently performing RI/FSs at a significant number of sites.

No removals are underway at State-lead NPL sites; there is no history of removals at State-lead NPL sites. Eight removals are currently underway at State sites. A total of 118 removals have been completed at non-NPL sites since start of program, 70 of these during FY93.

CLEANUP FUNDING

The Hazardous and Solid Waste Remediation Fee Fund (Fund 550) had a balance of $30.1M as of 8/31/93. Additions to the fund during FY94 (including funds from federal cooperative agreements) are projected to total $112.29M. The fund is available for site investigation, studies and design, removals, remedial actions, CERCLA match, operations and maintenance, and program administration. Its major source of funding is fees on hazardous waste disposal and on products including batteries and motor oil. Minor (<20%)

sources of funding include cost recoveries, interest, and penalties. The State projects FY94 expenditures of $132.03M from Fund 550, $84.18M for NPL sites and $47.85M for non-NPL sites. It has made obligations of $130.11M from Fund 550, $84.18M for NPL sites and $45.93M for non-NPL sites. Expenditure and obligation figures for FY93 are not available.

The Spill Response Fund had a balance of $292K as of 8/31/93. There were no additions to the fund during FY93. It is available for removals and emergency response. Its major source is appropriations; penalties are a minor (<20%) source. There were no expenditures or obligations from the fund during FY93.

CLEANUP POLICIES AND CRITERIA

Under Risk Reduction Standard 2 (TWC Rules, Ch. 335), TNRCC has promulgated preliminary remediation goals for over 150 chemical constituents which are to serve as starting points to determine cleanup levels and may require modification where exposure pathways that were not evaluated during development of the goals are of concern. Goals are determined through use of conservative, default exposure assumptions and standardized equations. Values are determined for each chemical by setting cumulative risk for ingestion, inhalation of volatiles, and inhalation of particulates at 10^{-6}. Soil values to protect groundwater are set at 100 times groundwater cleanup levels. Risk Reduction Standard 3 cleanup levels for air, surface and groundwater, and soil are determined through a site-specific process, use 10^{-6} as a goal, and require concentration to be consistent with risk between 10^{-6} and 10^{-4}. The State may also apply water quality criteria, MCLs, background levels, and EPA guidelines.

PUBLIC PARTICIPATION

Texas Health and Safety Code requires public notice and comment on site listing and remedy selection. TNRCC also meets informally with community as interest warrants.

ENFORCEMENT

Liability

Comprehensive order and injunctive authority, civil penalties of up to $25K/day, cost recovery, liens, de minimis settlement, mixed funding, and treble damages are available. The State uses strict, joint and several, and proportional liability standards. Proportional standard used only when the preponderance of evidence proves divisibility of liability.

Natural Resource Damages

The Texas Natural Resource Damages program was begun 4/90 and is funded by Fund 550. A total of $249K have been recovered to date. Twenty-six claims are pending; they total $50M.

Property Transfer

The Texas Property Code requires that sellers of up to 4 units of residential property disclose certain information to purchasers, including the presence on the site of radon, lead-based paint, or seismic faults, the location of the site in a 100-year floodplain, or the existence at the site of any condition which could materially affect the physical health or safety of an individual.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA, a CPCA, and SSCAs with U.S. EPA.

REGION VII

Iowa
Kansas
Missouri
Nebraska

IOWA

SITES

NPL Sites		State Sites	
Final:	19	Known and Suspected:	900
Proposed:	5	Identified as Needing Attention:	200
Deleted:	2	On Inventory or Priority List:	67

STATUTORY AUTHORITIES

The *Environmental Quality Act*, Iowa Code Ch. 455B (1972, as amended 1979, 1981, 1984, 1987, and 1991), establishes the Hazardous Waste Remedial Fund, provides cleanup and enforcement authorities for abandoned sites, establishes a priority list, allows for citizen suits and victim compensation, and restricts property transfers. Significant amendments concerning cleanup authority for abandoned and uncontrolled sites enacted in 1979, 1981, and 1987. A 1984 amendment establishes Hazardous Waste Remedial Fund.

The *Groundwater Protection Act*, Iowa Code Ch. 455E (1987), establishes procedures and criteria for cleanup.

The *Groundwater Hazard Documentation Law*, Iowa Code Ch. 558.69 (1987, as amended 1988), establishes disclosure requirements for real property transfers.

PROGRAM ORGANIZATION AND FUNDING

A subdivision of the DNR's Solid Waste Section is connected with the State superfund program. It is responsible for enforcement/remedial activities and the Registry of Hazardous Waste or Hazardous Substance Disposal Sites. Staff consists of 9.75 FTEs. Legal support is provided by DNR attorneys for administrative actions; the AG's office institutes all legal proceedings. Seventy five percent of funds for staff and administration are from Federal grants, 5% are from a cleanup fund, and 20% are from a solid waste account.

CLEANUP ACTIVITIES

The State could not provide data on cleanup activities. Remediation is currently underway at 9 NPL sites.

CLEANUP FUNDING

The Hazardous Waste Remedial (HWR) Fund has a balance of $1M (fiscal year 93, ending 6/30/93) with $154K/year collected through fees on the transport, treatment, and disposal of hazardous waste, and cost recoveries. Approximately $255K were added to the fund this year. Approximately $124K were paid out; $24K were spent on NPL activities and $100K were spent on non-NPL activities. No monies were obligated or encumbered.

The HWR Fund can be used for administration, site investigation, emergency response, removals, remedial actions, O&M, CERCLA match, and development of alternatives to land disposal. Seventy-five percent of the Fund must be used for remediation at non-CERCLA sites and for CERCLA cost share.

CLEANUP POLICIES AND CRITERIA

Cleanup decisions are made on a site-by-site basis pursuant to State regulations, which provide cleanup goals for groundwater, soils, and surface water. State hazardous waste narrative standards are Groundwater Action Levels based on lifetime health advisories, negligible risk levels, and MCLs. Risk assessment is used to determine applicable cleanup levels if groundwater contamination exceeds Action Levels.

PUBLIC PARTICIPATION

The State must provide technical advice and assistance to political subdivisions and to other persons upon request.

ENFORCEMENT

Liability

Liability is strict and the EQA preserves any legal or equitable rights, remedies or defenses. The State maintains that this preserves common law rules of joint and several liability. The State must try to negotiate a settlement with RPs prior to using Fund monies for cleanup. The State can issue orders and seek injunctions against RPs to clean up sites. The State can collect up to $1K/day for failure to notify, up to $10,000 for water or air violations, and treble damages for willful failure to clean up. Penalties are available for violations of air and water pollution laws.

Natural Resource Damages

EQA provides that a person having control over a hazardous substance is strictly liable for reasonable damages to natural resources, including costs of assessment. No NRD program exists within the agency.

Property Transfer

Law requires that a property owner must disclose on the deed or with the recorder of deeds that the site was or is being used for the disposal of hazardous substances, and a seller must disclose the presence of hazardous substances on a site before property transfer.

FEDERAL/STATE PARTNERSHIPS

The State has SSCAs and a CPCA with the U.S. EPA.

KANSAS

SITES

NPL Sites		State Sites	
Final:	13	Known and Suspected:	±450
Proposed:	2	Identified as Needing Attention:	200
Deleted:	3	On Inventory or Priority List:	396

STATUTORY AUTHORITIES

The Environmental Response Act (ERA), K.S. Ann. §65-3452 *et seq.* (1988), amends Kansas' hazardous waste law, enacted in 1981 and amended 1984 and 1985. The Act establishes the Environmental Response Fund (ERF) and provides enforcement authorities for cleaning up hazardous substances as well as hazardous wastes.

PROGRAM ORGANIZATION AND FUNDING

The Kansas Department of Health and Environment's Bureau of Environmental Remediation (BER) is responsible for Federal and State superfund cleanups, LUST, emergency response, above ground storage tanks, mine land reclamation, and landfill remediation. Fifteen of its 92 employees are assigned to superfund duties. In addition, 2.5 Department lawyers work on superfund. Administrative costs are covered by appropriations from the State's general fund as well as a cleanup fund and Federal grants.

CLEANUP ACTIVITIES

Currently, remediation actions are underway at 193 non-NPL sites and removals are underway at 6 non-NPL sites. Two hundred-twenty non-NPL sites have been fully remediated since the start of the program, 15 have been completed during the last fiscal year. Of 5 removals completed since the start of the State program, 1 was completed this fiscal year. No information on NPL sites was provided by the State.

CLEANUP FUNDING

The Water Plan Special Revenue-Contamination Remediation account is the primary cleanup account. The fund balance at the end of the fiscal year (6/30/93) was $1.4M. This fiscal year (6/30/93) $3.1M were added to the fund. Total monies obligated or encumbered were $489K for NPL activities and $904K for non-NPL activities. The State Water Plan Special Revenue Fund receives all of its funding from water use fees. The account is used for studies and design, removals, emergency response, site investigation, remedial actions, CERCLA match, program administration, and O&M.

The Environmental Response Fund is currently being financed with cost recovery collection from potential responsible parties, penalties, and transfers from the State Water Plan fund. FY93 ending balance of the fund was $486K. A total of $160K were paid out for non-NPL sites, and a total of $42K were obligated or encumbered for non-NPL sites. The fund can be used for site investigation, studies and design, remedial actions, and program administration, however the fund is primarily used for oversight of responsible party cleanups.

The Hazardous Waste Perpetual Care Trust Fund receives annual additions of $10K. It is designed primarily for activities at RCRA facilities, which pay fees to support it. However, up to 20% of the Fund may be used for emergencies at facilities closed prior to 1981. Current balance of the fund was not provided by the State.

CLEANUP POLICIES AND CRITERIA

BER uses groundwater cleanup target concentrations which the Bureau of Water has established. Groundwater regulations are under development. The State uses relevant State guidance (Kansas Action Levels), MCLs/MCLGs, and background levels.

PUBLIC PARTICIPATION

The State generally follows the National Contingency Plan public participation procedures, which require public meetings when contamination migrates beyond property boundaries. Meetings for on-site contamination are optional. The State is developing a contingency plan which will include guidelines on community participation.

ENFORCEMENT

Liability

The ERA authorizes strict liability and issuance of orders and injunctions against RPs to effect site cleanups. Civil penalties for violation of an ERA order are not available, however. Penalties are available under hazardous waste, nuisance, or water laws, and the State can use these authorities for enforcement (including cleanup of groundwater and soil). These penalties include $10K to $25K for hazardous waste, $10K for water pollution, and $5K for solid waste violations.

Natural Resource Damages

The Natural Resources Damage and Fishkill program began in the mid 1970s under the Water Pollution Act. At least one natural resource damages claim is currently pending.

Property Transfer

No property transfer provisions have been established.

FEDERAL/STATE PARTNERSHIPS

The State has SSCAs and CPCAs with the U.S. EPA.

MISSOURI

SITES

NPL Sites		State Sites	
Final:	23	Known and Suspected:	1253
Proposed:	0	Identified as Needing Attention:	163
Deleted:	0	On Inventory or Priority List:	51

STATUTORY AUTHORITIES

The *Missouri Hazardous Waste Management Law*, Mo. Rev. Stat. §§260.350 - 260.552 (1977, as amended in 1980, 1983, 1985, 1987, and 1988) authorizes the Hazardous Waste Remedial Fund and provides for a priority list, strict liability, site access, administrative order authority, civil and criminal penalties, and punitive damages. Legislation passed in 1993 (S.B. 80) provided authority for establishing a Voluntary Cleanup Program. Regulations are being developed; appropriations for staffing and administration to implement the program were not included in the Bill.

PROGRAM ORGANIZATION AND FUNDING

Department of Natural Resources (DNR), Division of Environmental Quality, Hazardous Waste Program has 5 sections: Superfund, Permitting, Budget and Planning, Federal Facilities, and an Enforcement Section that handles only RCRA sites. The State's Superfund Section has 21 technical and administrative staff. The Federal Facilities section has 13 FTEs. About 10 lab technicians located in the Environmental Services Program handle much of the field work. Other support agencies include the Division of Geology and Land Survey and the Missouri Department of Health. The Attorney General's office handles all litigation with 5 attorneys. Funding for staff and administration come from a cleanup fund and Federal grants.

CLEANUP ACTIVITIES

To date DNR has completed approximately 319 PAs and 170 SIs. Currently, 44 non-NPL sites are undergoing remediation and/or removal, 43 are RP cleanups with State oversight, and 1 is a State-funded cleanup. A total of 45 remedial actions and/or removals at non-NPL sites have been completed since the start of the program, 2 were completed in the last fiscal year (ending 6/30/93). Six of 23 remedial actions underway at NPL sites are State lead, and the State plans to take the lead on new sites added to the NPL.

CLEANUP FUNDING

The Hazardous Waste Remedial Fund has a balance of $5.8M (fiscal year 93, ending 6/30/93) primarily provided by taxes on hazardous waste generators based on tonnage and the method of handling waste. There is a $1.5M/year cap on this tax. Fees on landfilled waste also contribute, though the amount is now about $400K/year. Cost recovery, penalties/fines, interest, donations, and appropriations are all potential contributors. Approximately $2.5M were added to the fund during the fiscal year, $2.0M were paid out, and $500K were obligated or encumbered. The Fund may be used for site investigation, emergency response, removals, studies and design, remedial actions, CERCLA match, and program administration.

The Fund may be used for program administration, emergency actions, removals, studies and design, and remedial actions. It may also be used for the non-Federal share of O&M costs and to meet the State's CERCLA match. The Fund can be used for health studies, acquisition of property, and to study the development of a hazardous waste facility in the State.

CLEANUP POLICIES AND CRITERIA

The Department sets cleanup levels on a site-by-site basis. State water quality criteria, MCLs/MCLGs, risk standard assessment, and EPA guidelines may be used to set criteria. The State Health Department provides site-specific "any-use soil level" recommendations, which are utilized in conjunction with RCRA. Toxicity Characteristic Leaching Procedure (TCLP) criteria are used for soils.

PUBLIC PARTICIPATION

The Missouri Hazardous Waste Management Law provides for appeals through the Hazardous Waste Management Commission, which may convene a public hearing if a resolution of appeals cannot be negotiated. Public meetings, availability sessions, fact sheets, and news releases are commonly used to provide information to the public, and to solicit input from the public for decision making.

ENFORCEMENT

Liability

Strict liability standards and treble damages are available to the State. The State seeks RP cleanup first. If RPs are recalcitrant or insolvent, and if the site is small, the State will fund removal-type actions. If the cleanup is costly, the State will try to use EPA authority and funds. The State has had substantial success in convincing PRPs to conduct cleanups. Violations of property transfer or change of use laws may be subject to a penalty of $1K/day.

Natural Resource Damages

Missouri does not have a natural resource damages program. Natural resource damages can be pursued under water pollution and other laws. Claims include opportunity costs. While settlements have established that damages have occurred, the cost has not been specifically noted in the settlements.

Property Transfer

Property transfer provisions exist under Missouri's Hazardous Waste Management Law (Section 260.465 RSM.) The law requires disclosure on the deed that a site has been used for the disposal of hazardous substances. Sellers must disclose the presence of hazardous substances on the site before transfer, and changes of property use must be approved by the State. The State must maintain a database of sites.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA, a CPCA, and SSCAs with U.S. EPA.

NEBRASKA

SITES

NPL Sites		State Sites	
Final:	7	Known and Suspected:	370
Proposed:	3	Identification as Needing Attention:	120
Deleted:	0	On Inventory or Priority List:	*No List*

STATUTORY AUTHORITIES

The *Environmental Protection Act* (Neb. Rev. Stat. §81-1501 through §81-1533) does not cover Superfund sites specifically. However, Nebraska uses NCRR Vol. 8 Tit. 118 of its regulations, promulgated under §81-1505, to prohibit pollution of groundwater and set standards for cleanups.

PROGRAM ORGANIZATION AND FUNDING

The Superfund Section of the Integrated Waste Management Division of the Department of Environmental Quality has 10 FTE staff. Legal support is provided by 1 DEQ attorney. Administrative support costs are covered by Core grants and EPA funding (90%), and also from general state funds (10%).

CLEANUP ACTIVITIES

One removal and 3 remedial actions are underway at NPL sites.

CLEANUP FUNDING

No Superfund.

CLEANUP POLICIES AND CRITERIA

Cleanup standards are assessed on a site-by-site basis. Tit. 118 sets standards for groundwater cleanup, which are applied where appropriate, and water quality criteria, which are also applied where appropriate.

PUBLIC PARTICIPATION

Tit. 118 requires RPs to submit Remedial Action proposal based on "detailed site assessment." Public notice of the proposal is given by newspaper and radio, with copies available in public libraries. A 30-day comment period and any requested hearings run prior to final review.

ENFORCEMENT

Liability

Tit. 118 authorizes Nebraska to issue administrative order and injunctions against RPs generating groundwater pollution. The State may also seek judicial civil penalties. Citizen suits may be pursued against solid waste disposal violations in cities of 1st (largest) Class. Strict liability applies for groundwater pollution only. There are no civil or punitive damages.

Natural Resource Damages
No program.

Property Transfer
No program.

FEDERAL/STATE PARTNERSHIPS
Nebraska has a CPCA and SSCAs with U.S. EPA.

REGION VIII

Colorado
Montana
North Dakota
South Dakota
Utah
Wyoming

COLORADO

SITES

NPL Sites		State Sites	
Final:	16	Known and Suspected:	420 (CERCLIS)
Proposed:	3	Identified as Needing Attention:	-
Deleted:	1	On Inventory or Priority List:	-

STATUTORY AUTHORITIES

The Hazardous Waste Sites Act, Colo. Rev. Stat. §§25-16-101 *et seq.* (1985, as amended 1988 and 1990), establishes the Hazardous Substance Response Fund and the Natural Resource Damages Fund. Enforcement by Colorado is based on authorities in its other environmental statutes, such as the *Water Quality Control Act*, Colo. Rev. Stat. §§25-8-101 *et seq.*, and the *Hazardous Waste Management Act*, Colo. Rev. Stat. §§25-15-101 *et seq.*

PROGRAM ORGANIZATION AND FUNDING

Within the Office of Environment of the Department of Health, the Hazardous Materials and Waste Management Division contains 17.5 full-time staff working on Superfund. Fourteen staff in the Attorney General's office provide legal support. Funding for program administration comes from Federal grants (60%), from PRP response cost reimbursement (30%), and from the State cleanup fund (10%).

CLEANUP ACTIVITIES

Remediation is currently underway at 17 NPL sites. (This figure includes remedial action at proposed NPL sites). Two NPL sites have been fully remediated since the start of the cleanup program. There is no history of action at non-NPL sites (natural resource damages cases excluded).

CLEANUP FUNDING

The Hazardous Substances Response Fund, with a balance of $11.6M as of the end of the fiscal year (6/30/93), is available for CERCLA match, operations and maintenance, and program administration. Significant (>20%) sources of the fund include cost recoveries and fees; a minor source is interest. Additions to the fund during FY93 totaled $3.16M. Obligations from the fund during FY93 totaled $7.7M; expenditures totaled $2.5M.

The Natural Resource Damages Fund had a balance of $1.6M as of 6/30/93. Its sources are natural resource damages settlements and interest, and it may be used for natural resource restoration in accordance with CERCLA. Additions to the fund during FY93 totaled $1M. There have been no expenditures from the fund.

CLEANUP POLICIES AND CRITERIA

Cleanup levels are determined using water quality criteria, MCLs, background levels, risk assessment, and State ARARs, including hazardous waste remedial standards promulgated as part of its RCRA-type program. The State uses a risk level of 10^{-4} to 10^{-6}.

PUBLIC PARTICIPATION

Colorado has no formal public participation requirements. The Colorado Attorney General follows NCP guidelines in natural resource damages cases. The State currently makes increasing use of technical and non-technical advisory groups for input on decisions and future land use.

ENFORCEMENT

Liability

The State cleanup fund statute contains no enforcement authorities. Colorado may use other statutes (e.g., Water Quality Control Act, Hazardous Waste Management Act) for cleanup of some sites. State has used its hazardous waste law at Rocky Flats and Rocky Mountain Arsenal.

Natural Resource Damages

The State's natural resource damages program was begun in 1987 and has recovered approximately $5M to date. The State Attorney General has filed 7 NRD lawsuits, of which 5 have been settled, with remedial action underway. Two others are being addressed under Federal Superfund. The amount of pending claims is not specified. The State collects damages in settlements and segregates them for authorization by natural resource trustees as remediation is completed.

Property Transfer

The State has no property transfer provisions.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA, a CPCA, and SSCAs with U.S. EPA.

MONTANA

SITES

NPL Sites		State Sites	
Final:	8	Known and Suspected:	265
Proposed:	0	Identified as Needing Attention:	265
Deleted:	0	On Inventory or Priority List:	265

STATUTORY AUTHORITIES

The Comprehensive Environmental Cleanup and Responsibility Act (CECRA), Mont. Code Ann. §§75-10-701 through -724, (1989, as amended 1991 and 1993), provides enforcement authority, establishes the Environmental Quality Protection Fund, and provides a priority list.

State Participation in CERCLA, Mont. Code Ann. §§75-10-601 through -626 (1983, as amended 1987 and 1993), establishes the Hazardous Waste/CERCLA Special Revenue Account and gives the state bonding authority.

PROGRAM ORGANIZATION AND FUNDING

The Superfund Section of the Department of Health and Environmental Sciences (MDHES) Solid and Hazardous Waste Bureau has 25 full-time employees. Legal support is provided by 3 assistant Attorneys General assigned to the agency. Funding for program administration is provided by the State cleanup fund and by Federal grants.

CLEANUP ACTIVITIES

RI/FS activities are currently underway at 4 NPL and 25 non-NPL sites. RI/FS activities have been completed at 3 NPL and 13 non-NPL sites. No NPL sites have been fully remediated; however, 5 RODs involving operable units at 4 NPL sites have been fully implemented. Fifteen non-NPL sites have been fully remediated since the start of the cleanup program; 4 remediation actions have been completed at non-NPL sites during the last fiscal year (7/1/92-6/30/93). Removals are currently underway at 3 NPL and 5 non-NPL sites. Fifteen removals have been completed at NPL sites since the start of the cleanup program; 42 removals have been completed at non-NPL sites.

CLEANUP FUNDING

The Environmental Quality Protection Fund (EQPF), with a balance of $1.5M as of the end of the last fiscal year (6/30/93), is available for site investigation, studies and design, removals, emergency response, remedial actions, operations and maintenance, program administration, and natural resource restoration. The fund receives 6% of the interest earned by the State's Resource Indemnity Trust Fund, whose source is a mineral extraction tax; this amounts to about $400K each year. Another major (>20%) source of funds is cost recovery. Minor (<20%) funding sources include penalties, settlements, and natural resource damages. Additions to the fund during FY93 totaled $675K. During FY93, $4K from the EQPF were spent at NPL sites, and $627K at non-NPL sites.

The Hazardous Waste/CERCLA Special Revenue Account, with a balance of $1.5M as of 6/30/93, is available for CERCLA match, site investigation, remedial actions, and program administration, as well as for activities authorized by the Montana Hazardous

Waste Act, which is the State's equivalent of RCRA. The account receives 18% of the interest earned annually by the Resource Indemnity Trust Fund. The statute establishing the account provides bonding authority, but this authority has not been used. Other authorized funding sources whose contributions to the fund are not significant include cost recoveries, interest, and penalties and damages. Additions to the account during FY93 totaled $1.1M. During FY93, expenditures from the account totaled $873K, of which $22K was spent on CERCLA match.

CLEANUP POLICIES AND CRITERIA

CECRA requires cleanup that assures present and future protection of public health, safety and welfare, and the environment and that is consistent with all applicable and well-suited environmental requirements, criteria, and limitations. The State uses water quality criteria, MCLs, background levels, risk assessments, and EPA guidelines. Site-specific criteria may also be imposed. The State selects cleanup levels through an ARARs-type process and uses a risk level of 10^{-6} for risk assessments. It is required to select cleanups that use permanent solutions, are cost-effective, and that use alternative treatment technologies or resource recovery technologies to the maximum extent practicable.

PUBLIC PARTICIPATION

CECRA requires public notice and comment for administrative orders on consent and consent decrees. New amendments to CECRA require notice to local governing bodies and city commissioners and, at their request, a public meeting must be held. The agency typically allows for more participation than is required by CECRA.

ENFORCEMENT

Liability

MDHES is required to make a good-faith effort to have RPs clean up before expending State cleanup funds. The State can issue a unilateral order, negotiate a consent order, institute a civil action, or clean up a site using State funds. Penalties available to the State include administrative penalties of $1K/day and civil penalties of $10K/day. Double damages are also available. Montana uses strict, joint and several liability standards; PRPs have the right to demonstrate the need for proportional liability.

Natural Resource Damages

Montana's natural resources damages program, which is separate from the Superfund Section, was started in 1991, has a staff of 9, and has not recovered any funds. The State sued the Atlantic Richfield Company (ARCO) in 1983 for natural resource damages resulting from ARCO's mining and mineral processing activities at 4 NPL sites in the Upper Clark Fork River Basin. To support this pending lawsuit, the State completed an NRD assessment in 1993 at a cost of $5M; it is seeking $300M or more in damages.

Property Transfer

Montana has no property transfer provisions but plans to have a publicly available database with the locations of hazardous waste sites by 1994.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

NORTH DAKOTA

SITES

NPL Sites		State Sites	
Final:	2	Known and Suspected:	72 (CERCLIS)
Proposed:	1	Identified as Needing Attention:	0
Deleted:	0	On Inventory or Priority List:	*No List*

STATUTORY AUTHORITIES

North Dakota does not have its own State superfund law. Its *Hazardous Waste Management Act* (HWMA), N.D. Cent. Code §§23-20.3-01 to -10 (1981, as amended 1983, 1987 and 1991) provides authority that can be used in conjunction with cleanups, but it is limited. Its *Water Pollution Control Law*, N.D. Cent. Code §61-28-01 *et seq.* (1967), provides most enforcement authority used by North Dakota. A bill enacted by the 1989 legislature and effective 7/1/89 created the Environmental Quality Restoration Fund. N.D. Cent. Code §§23-31-01 to -03. This fund provides cost recovery authority but no liability standard. It applies to all environmental programs.

PROGRAM ORGANIZATION AND FUNDING

The State does not have a formal superfund program. The lead agency is the Division of Waste Management, in the Department of Health & Consolidated Laboratories' Environmental Health Section. There are 5 staff in the Hazardous Waste Program within the Division. The Division's legal support is an Assistant Attorney General assigned to the Department who works on all environmental programs. No employees work solely on superfund. The Hazardous Waste Program operates on EPA grants.

CLEANUP ACTIVITIES

There are 72 sites on the North Dakota CERCLIS list of which 51 require no further action. At 1 NPL site, a remedial action has been completed during the last fiscal year (ending 6/30/93). One remedial action is currently underway at an NPL site.

CLEANUP FUNDING

The Environmental Quality Restoration Fund will receive cost recovery monies and contributions from settlements. The fund may be used for emergency response, removals, remedial action, O&M, and administrative expenses. The fund balance is $79K (as of 6/30/93, end of fiscal year). An additional $50K was added in November of 1993. No monies were paid out or obligated or encumbered.

CLEANUP POLICIES AND CRITERIA

Cleanup levels will be determined on a site-by-site basis. Federal guidelines will be used where applicable.

PUBLIC PARTICIPATION

The Division notifies local officials with information about a site. Local communities can be involved in site activities.

ENFORCEMENT

Liability

The Water Pollution Control Law, which protects surface water and groundwater, and which governs activities that may pollute such water, is the primary enforcement statute. It authorizes administrative orders, injunctive relief, and civil and criminal penalties.

The HWMA authorizes administrative orders, injunctive relief, civil and criminal penalties.

Natural Resource Damages

No program has been established.

Property Transfer

No program has been established.

FEDERAL/STATE PARTNERSHIPS

The State currently has no partnerships.

SOUTH DAKOTA

SITES

NPL Sites		State Sites	
Final:	3	Known and Suspected:	218
Proposed:	1	Identified as Needing Attention:	218
Deleted:	0	On Inventory or Priority List:	218

STATUTORY AUTHORITIES

The *Regulated Substance Discharge Law*, S.Dak. Codified Laws Ann. §§34A-12-1 to -15 (1988, as amended 1989), establishes a cleanup fund and provides for strict liability, administrative order authority, injunctive relief, cost recovery, and liens.

The *Hazardous Waste Management Act*, S.Dak. Codified Laws Ann. §§34-11-1 to -23 (1983, as amended in 1988), provides for civil and criminal penalties, information orders, and site access.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environment and Natural Resources is the lead agency. State activities have been PAs, and supporting EPA in the Superfund processes performed with EPA funding. The Division of Environmental Regulation, Groundwater Quality Program has 3 FTEs dedicated to these activities. The Attorney General's office provides legal support as needed.

Federal grants provide 90% of the funds for staff and administration, and the State general fund provides 10%.

CLEANUP ACTIVITIES

South Dakota categorizes hazardous sites as "open" or "closed." Open sites are any known sites that are in any stage of activity or are awaiting activity. Closed sites have been fully remediated or have been determined to require no action.

Currently 218 sites are open, 546 sites have been closed. A total of 183 sites were closed during the fiscal year (ending 6/30/93). Remediation is currently underway at 1 NPL site and a removal is underway at 1 NPL site. Since the start of the program, 1 NPL removal was completed.

CLEANUP FUNDING

The Regulated Substances Response Fund had a balance of $1.72M at the end of the fiscal year. The legislature authorized a one-time transfer of $350K to the fund in 1989. A temporary fee increase on pesticides also provided $150K in earlier years. Current funding sources are penalties, fees, cost recovery, and interest. A total of $664K were added to the fund this fiscal year. No monies were paid out or obligated this fiscal year.

The fund may be used for administrative activities, emergency response, removals, investigations, studies and design, remedial action, CERCLA match, and managerial activities, with some restrictions.

CLEANUP POLICIES AND CRITERIA

The State uses State surface and groundwater standards for cleanup levels, where appropriate. State soil cleanup criteria are applied to petroleum, pesticide and fertilizer contamination. MCLs/MCLGs, background levels, water quality criteria, and EPA guidelines are also used to establish cleanup levels.

PUBLIC PARTICIPATION

At major milestones and upon request public participation activities may include public notices and public meetings.

ENFORCEMENT

Liability

The law authorizes orders and injunctive actions to cause the responsible person to conduct corrective action following the discharge of a regulated substance. The law defines liability for expenditures by the Department as strict, and provides for a lien on property cleaned up by the Response Fund. The State may levy a civil penalty of $10K/day per incident.

Natural Resource Damages

The State has no official NRD Program.

Property Transfer

The State has no property transfer provisions.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA and CPCAs with the U.S. EPA.

UTAH

SITES

NPL Sites		State Sites	
Final:	12	Known and Suspected:	200
Proposed:	1	Identified as Needing Attention:	31
Deleted:	0	On Inventory or Priority List:	13

STATUTORY AUTHORITIES

The Hazardous Substances Mitigation Act, Utah Code Ann. §19-6-301 to -321 (1991), provides enforcement authority, establishes the Hazardous Substance Mitigation Fund (HSMF), and provides for a priority list.

PROGRAM ORGANIZATION AND FUNDING

The CERCLA Branch of the Department of Environmental Quality, Division of Environmental Response and Remediation has a staff of 30. Legal support is provided by 1 attorney in the Division of Environmental Response and Remediation and 2 attorneys in the Utah Attorney General's Office. Funding for program administration is provided by the State general fund (4%) and by Federal grants (96%).

CLEANUP ACTIVITIES

Remedial actions are currently underway at 6 NPL and 19 non-NPL sites. One NPL and 11 non-NPL sites have been remediated since the start of the cleanup program. Three of the non-NPL sites were remediated during the last fiscal year (7/1/92-6/30/93). The State does not distinguish between remedial actions and removals.

CLEANUP FUNDING

The Hazardous Substance Mitigation Fund (HSMF) had a balance of $425K as of 6/30/93. It is available for site investigation, studies and design, removals, emergency response, CERCLA match, and operations and maintenance. Its sole source is appropriations. During FY93, $400K from the fund were expended at non-NPL sites; no funds were expended at NPL sites. Also during FY93, $675K were obligated for action at non-NPL sites; no funds were obligated for action at NPL sites. Additions to the fund during FY93 totaled $250K.

CLEANUP POLICIES AND CRITERIA

The State has adopted a flexible cleanup policy which addresses sites on a case-by-case basis and requires that the source of contamination must be eliminated or controlled. Residual levels are evaluated according to other background contaminants, environmental considerations, technical feasibility, and economic considerations. The State uses MCLs and other EPA guidelines where applicable. The State's Corrective Action Cleanup Standard Policy has been promulgated in the Administrative Code. Risk assessments are based on EPA guidelines (10^{-6} to 10^{-8} risk range).

PUBLIC PARTICIPATION

Utah has no formal public participation requirements. The State follows NCP public participation requirements. DEQ involves the public in the cleanup process on a site-specific basis. Strong public participation by PRPs and on a site-specific basis.

ENFORCEMENT

Liability

The State uses strict and proportional liability standards. Joint and several liability is explicitly not authorized. No punitive damages are available. Civil penalties of up to $10K/day are available.

Natural Resource Damages

Utah does not have a formal natural resources damages program. There is 1 claim pending, however; the State is seeking $12M.

Property Transfer

Utah does not have property transfer provisions.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA, a CPCA and SSCAs with U.S. EPA.

WYOMING

SITES

NPL Sites		State Sites	
Final:	3	Known and Suspected:	140 (CERCLIS)
Proposed:	0	Identified as Needing Attention:	-
Deleted:	0	On Inventory or Priority List:	-

STATUTORY AUTHORITIES

The Environmental Quality Act, Wyo. Stat. Ann. §§35-11-101 through -1428 (1973, as amended 1991 and 1993), establishes Wyoming's Environmental Quality Council and provides enforcement authority, citizen suit provisions, and property transfer provisions. The Act does not establish a cleanup fund, but it authorizes the use of funds from the Trust and Agency Account Fund to address hazardous waste emergencies. Wyoming relies upon its other environmental statutes for enforcement authorities.

PROGRAM ORGANIZATION AND FUNDING

Wyoming does not have a formal superfund program. Responsibility for hazardous waste issues is distributed among the several divisions of the Department of Environmental Quality, including the Solid and Hazardous Waste Division and the Water Quality Division. State officials could not provide a figure for the number of staff working full-time on hazardous waste issues. Legal support is provided by 5 attorneys in the Attorney General's office. Funding for program administration comes from the State general fund and from Federal grants.

CLEANUP ACTIVITIES

Remedial actions are underway at 2 Wyoming NPL sites. No Wyoming NPL sites have been fully remediated. No removals are currently underway at NPL sites. At least 2 removals have been completed at NPL sites. State officials could not provide information on activity at non-NPL sites.

CLEANUP FUNDING

Although Wyoming has no cleanup fund, DEQ is authorized to use funds from the Trust and Agency Account Fund to remedy and abate hazardous waste emergencies. The State could not provide information about the financial status of this fund (e.g., balance, additions, obligations, expenditures).

CLEANUP POLICIES AND CRITERIA

Cleanup levels are established on a site-by-site basis using Federal standards, such as MCLs and ACLs, where appropriate. The State has standards for inorganic and organic compounds in water and establishes site-specific cleanup criteria based on groundwater and surface water protection standards. If no appropriate standard exists, background levels and risk-based levels are applied. The State uses risk levels of 10^{-6} for carcinogens and 1.0 HI for non-carcinogens.

PUBLIC PARTICIPATION

Wyoming has no formal requirements for public participation. Information obtained by DEQ under the EQA is available for public review. Citizens may comment on rulemakings and permitting decisions. Wyoming also makes use of citizen commissions at significant sites.

ENFORCEMENT

Liability

Civil penalties of up to $10K/day are available for violations of the EQA; for willful and knowing violations, penalties of up to $25K/day are available. No punitive damages are available. The State uses a joint and several liability standard, but there is no statutory provision for this standard.

Natural Resource Damages

Wyoming has no natural resource damages program, but it is authorized to use penalties collected under the EQA for natural resource damages.

Property Transfer

The presence of hazardous substances on a site must be recorded on the deed to the property. Although the State may use judgment liens to recover State costs on cleanups, there is no superlien provision.

FEDERAL/STATE PARTNERSHIPS

The State has SSCAs with U.S. EPA.

REGION IX

Arizona
California
Hawaii
Nevada

ARIZONA

SITES

NPL Sites		State Sites	
Final:	11	Known and Suspected:	450
Proposed:	0	Identified as Needing Attention:	65
Deleted:	1	On Inventory or Priority List:	25

STATUTORY AUTHORITIES

The *Environmental Quality Act*, Ariz. Rev. Stat. Ann. (ARSA), Tit. 49, Ch. 281 to 287 (1986, as amended 1987, 1990, and 1992), establishes the Water Quality Assurance Revolving Fund and provides for strict, joint and several liability, administrative orders, abatement and remedial actions, injunctive actions, civil penalties, cost recovery, and treble damages. The 1992 Amendments, ARSA, Tit. 49, Ch. 290 §10, Ch. 291 §8 and Ch. 300 §5, identify sources of Fund monies, authorize uses of the Fund, set forth remedial action criteria, and provide additional enforcement authority. ARSA, Tit. 49, Ch. 295 (1992) provides for environmental lien authority.

PROGRAM ORGANIZATION AND FUNDING

The Remedial Projects Section in the Office of Waste Programs (OWP), Department of Environmental Quality (DEQ), has 26 full-time staff. The State Attorney General's office provides 3 staff for legal support.

The Fund covers 58% of administrative costs, with Federal grants providing the remaining 42% of the funding.

CLEANUP ACTIVITIES

Remedial actions are currently underway at 4 NPL sites with 1 site completed since the start of the program. Removals are currently underway at 5 NPL sites with 4 sites completed in the 1993 fiscal year (FY93).

Remedial actions are underway at 7 non-NPL sites with 6 actions completed since the start of the program and 2 completed in FY93. Removals are currently underway at 4 non-NPL sites. Fifty removals have been completed since the start of the program and 11 removals were completed in FY93.

CLEANUP FUNDING

The Water Quality Assurance Revolving Fund had a balance of $3.74M at the end of the fiscal year (6/30/93). Additions totalled $4.52M during FY93. Expenditures for NPL and non-NPL sites totaled $7,272,900. The State could not provide information on expenditures or obligations for the non-NPL portion of the program.

Currently, the Fund consists of monies from cost recoveries and a variety of fees including fertilizer license, pesticide registration, water quality assurance, industrial discharge registration, aquifer protection permit application, solid waste landfill registration and hazardous waste facility fees. Appropriations are generally a significant source of Fund monies, although no money was appropriated in FY93. Penalties, taxes, bonds interest and transfers are minor sources of Fund monies.

The Fund is used to pay for program administration, site investigation, studies and design, removals, remedial actions, emergency response, CERCLA match, grants to local government, and operation and maintenance.

CLEANUP POLICIES AND CRITERIA

Remedial actions must assure the protection of public health and welfare and the environment, allow the maximum beneficial use of State waters, and be cost effective over the period of potential exposure to hazardous substances.

The State applies hazardous waste cleanup standards (40 CFR, Parts 260-280, RCRA standards adopted by reference), MCLs, and State water quality standards where appropriate. If there is no standard available for a specific contaminant, background levels and health-based guidance levels (HBGLs) are used. HBGLs are unenforceable risk assessment-based guidelines which may be used as cleanup levels when a party voluntarily agrees to use them or EPA adopts them as ARARs. Site-specific risk assessments use a 10^{-6} level for chronic effects and the oral reference dose for acute effects.

PUBLIC PARTICIPATION

The State has a 30-day public comment period for site and program actions. Associated meetings and hearings are discretionary, but one or both are held as standard practice.

ENFORCEMENT

Liability

Strict, joint and several liability applies to the State's cleanups. The preferred approach to assignment of liability is to work with steering committees which apportion liability. Civil penalties are $5K/day, plus 3 times the remedial action costs for failure to comply with an order. Treble damages are authorized.

Natural Resource Damages

Although the State has no written policy, all cleanup settlements, signed by the State's Director (since July 1991), contain a clause reserving the right to claim or assess natural resource damages. No damages have been recovered and no claims are pending.

Property Transfer

The State has environmental lien authority (ARSA §49-295) and the responsible party must pay all costs before the State will remove the lien. The lien is not superior to prior recorded liens. The Arizona Real Estate Department has a unenforceable policy which advises realtors to disclose material defects, including actual or potential contamination, to potential lawyers.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

CALIFORNIA

SITES

NPL Sites		State Sites	
Final:	96	Known and Suspected:	26,000
Proposed:	6	Identified as Needing Attention:	350
Deleted:	1	On Inventory or Priority List:	26,000

STATUTORY AUTHORITIES

The *Hazardous Substance Account Act*, Cal. Health & Safety Code §§25300 *et seq.* (1981, as amended 1982, 1983, 1984, 1986, 1987, 1988, 1989, 1990, 1991, and 1992) which includes the *Hazardous Substance Cleanup Bond Act of 1984*, §§25385 through 25386.6, and the *Hazardous Substance Cleanup Financing Authority Act*, §§25392 through 25395 (1984), establishes site mitigation program and provides cleanup fund.

Property transfer disclosure requirements are included in §25359.7, ch. 6.8 of the Cal. Health & Safety Code.

PROGRAM ORGANIZATION AND FUNDING

The Department of Toxic Substances Control (Department), Site Mitigation Program is staffed with 235 people in 4 regional offices and headquarters. The Department's Office of Legal Counsel and Criminal Investigation has 25 attorneys assigned to the Site Mitigation Program, and the Attorney General's Office provides another 5-6 attorneys. The Department also works with the California Water Resources Quality Control Board and the Regional Water Quality Control Boards. The Regional Water Quality Control Boards also undertake their own cleanups in cases of "classic" groundwater contamination.

Funding for the Department's Site Mitigation Program comes primarily from the Hazardous Waste Control Account, Federal grants, hazardous waste disposal fees, cost recovery, reimbursements, and activity fees. The budget for site mitigation activities is $59M, of which $5.4M is for direct site cleanup.

CLEANUP ACTIVITIES

The State Inventory List is being evaluated to exclude any invalid sites and will probably end up with less than 26,000 sites listed. Since the start of the State's cleanup program, 4 NPL and 232 non-NPL sites have been fully remediated. Remediation is currently underway at 40 NPL and 232 non-NPL sites. During FY93, remediation actions were completed at 1 NPL and 13 non-NPL sites. Since the start of the State's program, removals have been completed at 61 NPL and 340 non-NPL sites. During FY93, removals were completed at 4 NPL and 74 non-NPL sites. Additionally, 2,216 emergency response incidents have been funded, since the start of the State's program, for a total of $8.3M.

CLEANUP FUNDING

The Hazardous Substances Account has joined with the Hazardous Waste Control Account (HWCA), which had a balance of $14M at the end of the fiscal year (6/30/93). During FY93, the HWCA received $107M and paid out $88.6M. Fees were the major source of funding, with cost recoveries and taxes making minor contributions. The fund may be used for site investigation, studies and design, removal and remedial actions (prohibited until RPs are given notice and opportunity to clean up), emergency response, O&M, State CERCLA match, program administration, and enforcement against RPs.

The Hazardous Substance Cleanup Bond Fund had a balance of $12.9M at the end of FY93. This account is funded by bond issuance. This fund can be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, O&M, and grants to local government.

CLEANUP POLICIES AND CRITERIA

Site-specific cleanup levels are based on acceptable risks, future land use, and the NCP's 9 balancing criteria. The State sets risk levels at 10^{-4} to 10^{-7}, with 10^{-6} as a point of departure. Remedial action plans must be based upon, among other things, the effect of contamination on beneficial uses of resources, the effect of alternative remedial action measures on groundwater, site-specific characteristics, and cost effectiveness. The State has promulgated MCLs for many water contaminants and a number of other standards, including air toxics. The State also uses background levels, risk standard assessment, and EPA guidelines to determine cleanup levels.

PUBLIC PARTICIPATION

The Department must hold at least one public meeting before adopting a remedial action plan, and must review and consider public comments. Anyone affected by a removal or remedial action must be provided with the opportunity to participate in the Department's decision making process. The Department must develop, and make available to the public, a schedule of activities for each site.

ENFORCEMENT

Liability

The State has strict and proportional liability standards. The Department generally pursues CERCLA standards as well to recover its costs. The State has civil or administrative penalty authority for up to $25K/day for violating an order/agreement and criminal penalties up to $25K/day and/or imprisonment for up to 1 year. Treble punitive damages are available. There is a citizen suit provision under Proposition 65. A PRP may seek judicial review of a final remedial action plan. An RP must be given notice and opportunity to assume cleanup responsibility and fail to comply, in order for the State to undertake a cleanup or enforcement activity. Recent legislation allows cooperating RPs to sue non-cooperating RPs for 3 times their share of cleanup costs. The cooperative RPs get 1/2 of the award and the Department gets 1/2 of the award.

Natural Resource Damages

The Department of Toxic Substances Control and the Department of Fish and Game have been delegated as the State's Trustees for natural resources. The Department of Toxic Substances Control is currently developing its program. The Department of Fish and Game has been working with natural resource damage assessment law since the early 1960s. They restore damaged natural resources using reimbursable funding from RPs and the Department of Fish and Game's Pollution and Abatement Account. They could not provide a total amount of money recovered, but the total for just 3 major NRD recoveries came to $23,855,533. The Department of Fish and Game is currently pursuing 12 NRD claims,

which total over $100M. Currently, approximately 25 full-time staff manage the Department's NRDA activities, which include: identifying and quantifying NRDs; identifying feasible restoration alternatives and their costs; calculating compensation; and coordinating with Federal and State co-trustees.

Property Transfer

California requires disclosure before the transfer of property.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and 2 SSCAs with U.S. EPA.

HAWAII

SITES

NPL Sites		State Sites	
Final:	2	Known and Suspected:	2,500
Proposed:	1	Identified as Needing Attention:	-
Deleted:	0	On Inventory or Priority List:	-

STATUTORY AUTHORITIES

The *Environmental Response Law*, Haw. Rev. Stats. §§128D-1 *et seq.* (1988, as amended 1991), establishes a fund for removals and remedial response actions and provides for strict, joint and several liability, administrative order and site access authority, civil and criminal penalties, reporting requirements, cost recovery, and provision of alternative water supplies.

PROGRAM ORGANIZATION AND FUNDING

The Hazard Evaluation and Emergency Response Office (HEER) in the Environmental Management Division of the Department of Health has 15 full-time employees. One attorney from the Attorney General's Office works 25% for HEER. HEER gets approximately 90% of its funding from Federal grants and 10% from the State general fund.

CLEANUP ACTIVITIES

The HEER Office is currently developing and entering site specific information into a database. They expect complete data base to be finalized in FY94. The State cannot provide site-specific information until then.

CLEANUP FUNDING

The Environmental Response Revolving Fund had a balance of $223K at the end of the fiscal year (6/30/93). During FY93, $255K was added to the fund and $33K was paid out for non-NPL sites. Significant sources of funding include appropriations, penalties and a new oil tax. Cost recoveries and interest are also minor sources of funding. This fund may be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, O&M, and natural resource restoration.

CLEANUP POLICIES AND CRITERIA

The HEER Office is developing risk management criteria and cleanup policies and has adopted the NCP as interim rules. The HEER Office also plans to promulgate fate and transport screening methods for determining remediation levels in FY94. Currently, the State selects cleanup standards on a site-by-site basis, using EPA risk assessment methods. Water quality criteria, MCLs/MCLGs, and background levels are used where appropriate. Consistent with the NCP, the State uses a risk range between 10^{-4} and 10^{-6}.

PUBLIC PARTICIPATION

Public participation will be defined in administrative rules. They will include establishing an Administrative Record, publishing notice of availability of the Administrative Record in a newspaper, and soliciting public comments on the proposed action. The Department of Health is required to develop a public education program for hazardous waste issues.

ENFORCEMENT

Liability

Liability is strict, joint and several, and includes liability for natural resource damages. Civil penalties are available for $10K/day for failure to report a release and at least $50K/day per violation for failure to comply with an enforcement order. Punitive damages for failure to perform removal or remedial actions are treble. Cost recovery actions must be commenced within six years of completion of response actions.

Natural Resource Damages

Hawaii's superfund statute allows the State to recover NRDs and use the Environmental Response Revolving Fund for restoration, rehabilitation, replacement or acquisition of natural resources that were damaged or destroyed due to a release. No money has been recovered since the start of the program in 1990, and no claims are pending.

Property Transfer

Hawaii does not have a property transfer provision.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA with U.S. EPA.

NEVADA

SITES

NPL Sites		State Sites	
Final:	1	Known and Suspected:	145
Proposed:	0	Identified as Needing Attention:	145
Deleted:	0	On Inventory or Priority List:	-

STATUTORY AUTHORITIES

Nev. Rev. Stat. §§549.400-459.600 (1981, as amended 1983, 1985, 1987, 1989, 1991), known as the "Hazardous Waste Statute," primarily covers operating facilities. It gives authority for spill cleanup by either the State or responsible parties. It also establishes the Hazardous Waste Management Fund. The 1991 amendment strengthens the ability to require and perform site assessments.

The *Water Pollution Control Law*, Nev. Rev. Stat. §445, provides for additional enforcement authorities.

PROGRAM ORGANIZATION AND FUNDING

The Bureau of Corrective Actions, part of the Department of Conservation and Natural Resources' Division of Environmental Protection, oversees the State's Superfund, RCRA, and UST programs. The Bureau has a full-time staff of 24. The Attorney General's Office supplies 2 attorneys to the Division.

The cleanup fund provides 80% of the funding for the Corrective Actions program; another 20% comes from Federal grants.

CLEANUP ACTIVITIES

The authorized RCRA regulatory program, and statutory authority under the Water Pollution Control Law are the primary mechanisms used to require and oversee remedial actions. The Bureau of Federal Facilities handles federal facilities. There are currently remedial actions underway at 145 non-NPL sites and removals underway at 2 non-NPL sites. Since the start of the State's cleanup program, removals have been completed at 2 non-NPL sites, and 1 removal was completed at a non-NPL site during FY93. Ongoing cleanups for sites with RPs include hydrocarbon contamination, hazardous waste releases, emergency response actions, abandoned sites, and problems related to mining.

CLEANUP FUNDING

The Hazardous Waste Management Fund had a balance of $6M at the end of the fiscal year (6/30/93). During FY93, approximately $250K was paid out from the fund for non-NPL sites. The State could not provide information about obligations from the fund. Most of the additions come from waste volume fees. Cost recoveries and penalties are also minor sources of funding, but the State has not been aggressively pursuing cost recoveries recently. The fund monies may be used for site investigation, studies and design, removals, emergency response, remedial actions, CERCLA match, O&M, and natural resource restoration.

CLEANUP POLICIES AND CRITERIA

The State has adopted regulations which establish standards for soil and groundwater contaminated by petroleum products. The Contaminated Soil and Ground Water Policy of 6/25/92 set remediation standards for other releases. Water quality criteria, MCLs/MCLGs, and risk standard assessments are used to set these standards.

PUBLIC PARTICIPATION

A draft public participation policy (9/20/93) states that the Corrective Action Bureau will, at a minimum, strictly adhere to NDEP public participation requirements, which address public notification, public hearings, public records, advisory groups, appeal procedures, and input to regulatory and statutory development. In addition, the Bureau of Corrective Actions will conduct public outreach to educate the regulated community and the general public about its programs.

ENFORCEMENT

Liability

Liability is strict for those in possession of hazardous material involved in a spill. Administrative order authority, including orders for information and site access, subpoena authority, injunctive action, criminal penalties, and cost recovery are available. Cost recovery is generally secured in consent agreements. Civil penalties of $25K/day per violation are available.

Natural Resource Damages

Nevada does not have a natural resource damages program.

Property Transfer

Nevada does not use property transfer provisions.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

REGION X

Alaska
Idaho
Oregon
Washington

ALASKA

SITES

NPL Sites		State Sites	
Final:	7	Known and Suspected:	1051
Proposed:	0	Identified as Needing Attention:	1051
Deleted:	0	On Inventory or Priority List:	1051

STATUTORY AUTHORITIES

The Oil and Hazardous Substance Releases Law, Alaska Stats. §§46.08.005 to .900 (1986, as amended 1989), authorizes a fund and provides for administrative and consent order authority, injunctive relief, civil and criminal penalties, and cost recovery.

The *Hazardous Substance Release Control Law,* Alaska Stats. §§46.09.010 to .900 (1986), covers enforcement and other provisions.

The *Liability and Cost for Oil and Hazardous Substances Discharge Law,* Alaska Stats. §§46.03.822 *et seq.* (1989), was enacted in response to the Exxon Valdez spill and provides for strict, joint and several liability.

PROGRAM ORGANIZATION AND FUNDING

The Department of Environmental Conservation, Spill Prevention and Response Division, Contaminated Sites Remediation Section is responsible for cleanup activities at historically contaminated sites. This section has 42 FTEs devoted to State and Federal Superfund activities. Funding for staff and administration is provided by the Response Fund (68%) and Federal grants (32%). The Office of the Attorney General provides legal support with less than 1 FTE.

Spill emergency response is handled by the Division's Government Preparedness and Response Program.

CLEANUP ACTIVITIES

DEC has developed a site ranking system distinct from the Federal HRS. Sites are included on the list if they have contamination exceeding action levels and are not associated with a permit or other program.

The State completed cleanups at 44 non-NPL sites during fiscal year 1993 (ending 6/30/93) and has completed cleanup at 150 non-NPL sites since the start of its program. Cleanups are currently being conducted at 350 non-NPL sites. Sixteen removals were completed during FY93 and 207 removals have been completed at non-NPL sites since the program began.

Remediation is currently underway at 6 NPL sites; 1 site has been remediated since the start of the program.

CLEANUP FUNDING

The legislature allocated $1.6M for cleanup activities from the Oil and Hazardous Substance Release Response Fund for fiscal year 1993 ending 6/30/93. The State could not provide a balance for the Fund at the end of FY93. Fund monies may be used for site investigation, emergency response, removals, remedial actions, and the State's share of Federal oil discharge cleanups and CERCLA match. These monies derive from a 5¢ per barrel tax on oil from the pipeline. The Fund has a $50M ceiling.

Monies from forfeited performance bonds, cost recovery and penalties are placed into a "mitigation account" which is separate from the Fund but available for the same purposes.

CLEANUP POLICIES AND CRITERIA

The State uses MCLs/MCLGs, water quality criteria, EPA guidelines, risk assessment, background levels, and promulgated standards for cleanup of petroleum in soils in addressing contaminated sites. State guidelines provide for cleanup to background or for performing a leaching assessment that ensures the proposed cleanup standard will not affect groundwater.

PUBLIC PARTICIPATION

The Department attempts to involve the public depending on the seriousness of the site and on public interest.

Citizen advisory panels are formed for major cleanups. National Contingency Plan public participation guidelines are followed. The legislature has established a Citizens' Oversight Council on Oil and Hazardous Substances.

ENFORCEMENT

Liability

Liability is strict, joint and several. Civil penalties are $500 to $100K for first violations, and no more than $10K/day that a violation continues. Individuals are subject to criminal penalties of $10K/day, up to one year imprisonment, or both, for knowingly falsifying documents used for purposes of compliance monitoring.

Natural Resource Damages

The State has reached settlements for natural resource damages.

Property Transfer

No provisions pertain to property transfer.

FEDERAL/STATE PARTNERSHIPS

The State has a CPCA and SSCAs with U.S. EPA.

IDAHO

SITES

NPL Sites		State Sites	
Final:	8	Known and Suspected:	220
Proposed:	2	Identified as Needing Attention:	50
Deleted:	1	On Inventory or Priority List:	*No List*

STATUTORY AUTHORITIES

Idaho has no State superfund law. The *Idaho Hazardous Waste Management Act* (HWMA), Idaho Code §§39-4401 to -4432 (1983, as amended 1984, 1986, 1987, and 1988), establishes two funds, but provides minimal legal authority for site cleanups. The Act also provides for citizen suits.

The *Environmental Protection and Health Act* (EPHA), Idaho Code §§39-101 to -130 (1972, as amended 1993) provides enforcement authority for the Division of Environmental Quality (DEQ) to administer air quality, water quality, and health related programs, to promulgate regulations, and current enforcement.

PROGRAM ORGANIZATION AND FUNDING

Two divisions within the Division of Environmental Quality in the Department of Health and Welfare share CERCLA responsibilities: the Division of Planning and Evaluation, which handles Core grant funding and support services; and the Division of Community Programs, which handles pre-remedial activities and site-specific remedial work. Between the two divisions, 17 FTE work primarily on Superfund. Four deputy Attorney Generals are assigned to handle cleanup cases for the DEQ. Program support is provided by Federal grants and monies collected from responsible parties.

CLEANUP ACTIVITIES

At non-NPL sites, the State has completed 1 remedial action since the program started, and currently has 3 underway.

At NPL sites, 4 remedial actions are underway and 2 have been completed since the beginning of the program. One remedial action has been completed in fiscal year 1993 (7/1/92-6/30/93). One removal is currently underway. Five removals have been completed since the start of the program, 1 in FY93.

CLEANUP FUNDING

Funding for cleanups is generally obtained by legislative appropriations. The HWMA, however, establishes the Hazardous Waste Training, Emergency, and Monitoring Account. This Account had a balance of $2.9M at the end of FY93. Almost $3.12M was added during FY93, and $916K was paid out, all for work on non-NPL sites. The HWMA authorizes use of this Account for necessary removal and remedial actions, but program staff caution that this is primarily a hazardous waste management fund, not a cleanup fund. Additions come primarily through appropriations and waste disposal fees.

The HWMA also establishes the Hazardous Waste Emergency Account, which can be used for emergency response. This Account had a balance of $235K at the end of FY93. $43.7K was added in FY93, and $23.7K was paid out, all of it for NPL sites. The Account's primary sources of monies are penalties and cost recoveries. It is not relied on heavily by the DEQ.

CLEANUP POLICIES AND CRITERIA

Idaho currently uses EPA guidelines. The DEQ is in the process of promulgating water quality standards and air toxic standards.

PUBLIC PARTICIPATION

Idaho has no formal program, but attempts to fulfill EPA guidelines. For example, a full-time on-site community relations person has been contracted for the Bunker Hill NPL site. This person coordinates monthly public meetings, manages media contact, and deals with community health concerns. The State is in process of promulgating water quality and air toxic standards.

ENFORCEMENT

Liability

For emergency conditions, the State has injunctive and order authorities under the Idaho Environmental Protection and Health Act. The State can receive $10K/day in civil penalties, but no punitive damages are available. State has essentially no enforcement authorities under the HWMA.

Natural Resource Damages

Idaho has received $5M since the program started in 1985. One claim is currently pending.

Property Transfer

No law.

FEDERAL/STATE PARTNERSHIPS

Idaho has a CPCA and SSCAs with U.S. EPA.

OREGON

SITES

NPL Sites		State Sites	
Final:	9	Known and Suspected:	1235
Proposed:	3	Identified as Needing Attention:	102
Deleted:	-	On Inventory or Priority List:	63

STATUTORY AUTHORITIES

The *Environmental Cleanup Law*, Or. Rev. Stats. §§465.200-.420, 465.995 (1987, as amended 1989, 1991), establishes the Hazardous Substance Remedial Action Fund (HSRAF) and a priority list, and provides for strict liability, administrative order authority for cleanup, injunctive relief, civil penalties, cost recovery, liens, and punitive damages. Amendments establish the Orphan Site Account within HSRAF and modify the inventory provisions for State sites (ORS §465.215-.245). Amendments of 1991 require classification of the secured creditor exemption and extend defenses to liability for contamination caused solely by acts of God and war, and third parties to "knowing purchasers."

PROGRAM ORGANIZATION AND FUNDING

The State has recently reorganized so that the lead agency is now the Waste Management and Cleanup Division (WMCD) in the Department of Environmental Quality (DEQ). The Program has 98 budgeted FTEs. One FTE from the Oregon Department of Justice (AG) handles litigation and advises the WMCD as requested.

Funding for staff and administrative costs is provided by the HSRAF and by Federal grants.

CLEANUP ACTIVITIES

Remediation is currently underway at 127 non-NPL sites of which 74 are voluntary cleanup projects with State oversight provided by the Voluntary Cleanup Section. Twenty non-NPL sites have been fully remediated to date, with 4 of those being voluntary cleanups. Removals are underway at 15 non-NPL sites, including 5 in the enforcement program and 10 in the voluntary program. Fifteen non-NPL removals were completed during the last fiscal year (ending 6/30/93), and 33 have been completed since the start of the program. Seven non-NPL sites have been remediated in FY93. Nine remedial actions and 2 removals are underway at NPL sites.

CLEANUP FUNDING

HSRAF has a budgeted balance of $2.51M for the 91-93 biennium ending 6/30/93, with an annual average of $5.39M collected from cost recovery, penalties and fines, and a monthly fee on the operator of the State's only hazardous waste and PCB disposal facility.

The HSRAF can be used for emergency response, site investigations, removals, studies and design, remedial actions, O&M, program administration and State CERCLA match.

The Orphan Site Account has a budgeted balance of $2.96M for the 91-93 biennium (6/30/93). Orphan Site Account bonds totalling $7.3M were issued and a second bond sale for $5M is planned for 1/94. For purposes of bond debt retirement, HSRAF collects equal amounts from hazardous substances fees, petroleum fees, and solid waste tipping fees.

CLEANUP POLICIES AND CRITERIA

State regulations require cleanup to the "lowest feasible concentration." Cleanup must be protective and cost-effective. Background is the State's preferred cleanup level.

Oregon has adopted numeric standards for soil cleanup of 76 compounds at "simple" sites. These soil cleanup standards allow greater residual contamination in industrial zones. The State also applies water quality criteria, MCLs/MCLGs, and other EPA guidelines, where appropriate. At complex sites, the State may use a risk assessment standard with a risk level of 10^{-6} for each contaminant and a Hazard Quotient/Hazard Index = 1.

PUBLIC PARTICIPATION

The law mandates public notice of DEQ's program for identifying releases, proposed settlement agreements, and all proposed remedial actions, with a 30-day comment period. Public meetings are required for proposed remedial actions if requested by a minimum of 10 people. Public notice is provided for final remedial action.

Regulations for the statute were promulgated, as mandated, with significant input from a 22-member committee composed of citizens, local governments, environmental groups, and industry.

ENFORCEMENT

Liability

The statute establishes strict liability for owners, operators, and any person who caused or contributed to a release of a hazardous substance. Liability is joint and several. However, transporters and off-site generators are generally not liable.

The statute authorizes administrative orders, injunctive relief, cost recovery, liens and treble damages. WMCD favors an approach that seeks voluntary cleanup from PRPs prior to issuance of orders; use of the Fund is the agency's last choice.

Natural Resource Damages

Responsible parties are liable under State law for natural resource damages. Only limited attention has been given to this issue by the agency. One claim is pending.

Property Transfer

No provisions pertain to property transfer.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA, CPCA, and SSCAs with U.S. EPA.

WASHINGTON

SITES

NPL Sites		State Sites	
Final:	52	Known and Suspected:	1029
Proposed:	-	Identified as Needing Attention:	628
Deleted:	2	On Inventory or Priority List:	401

STATUTORY AUTHORITIES

The *Model Toxics Control Act*, Wash. Rev. Code ch. 70.105D (1988), authorizes funding for two accounts, provides enforcement authorities, establishes a priority list, and provides for citizen suits, replacement water supplies, and public participation procedures.

PROGRAM ORGANIZATION AND FUNDING

The Department of Ecology, Waste Management Division, includes the Toxics Cleanup Program which has 145 staff. Thirty-five of the positions are federally funded -- the remaining are supported by the State Toxics Control Account. The Attorney General's office, handling settlements, has approximately 3-4 FTEs working on cleanups.

CLEANUP ACTIVITIES

The State spent $25.88M from the State account on cleanups at non-NPL sites and an additional $2.90M on non-NPL sites from the Local account. Construction of remedial actions is underway at 102 non-NPL sites and 33 removals are underway at non-NPL sites. The State completed remediation at 8 non-NPL sites during FY93 at 40 sites since the program began. In addition, 6 removals were completed during FY93 (ending 6/30/93), bringing to 36 the number of removals completed during the life of the program. Eighty-eight remedial actions and 4 removals are underway at NPL sites. 10 remedial actions have been completed since the start of the program, 4 in FY93. Three NPL removals have been completed to date, 2 in FY93.

CLEANUP FUNDING

The Department administers two accounts which are replenished biennially: (1) the State Toxics Control Account and (2) the Local Toxics Control Account.

The State account receives 47% of the revenue from a tax on the wholesale value of hazardous substances, plus cost recovery, penalties and fines. The balance in the State account was $4.83M at the end of the fiscal year (6/30/93). The State account received $24.34M in FY93. The Legislature must appropriate fund monies for cleanup.

The State account can be used for site investigation, emergency response, removals, studies and design, remedial actions, O&M, State CERCLA match, and program administration. The State account funds related activities in other agencies in addition to various divisions with Ecology. Part of the cleanup fund is set aside for LUST hardship cleanups. Penalties and fines are earmarked for best management practices and recycling, not cleanup.

The Local account receives 53% of tax revenue from the tax on the wholesale value of hazardous substances to help local governments pay for site cleanups, waste planning, reduction and recycling. The balance in the Local account at the end of FY93 was $41.48M and $21.26M was added to the account in FY93.

CLEANUP POLICIES AND CRITERIA

Cleanup levels must be at least as stringent as all applicable State and Federal laws. The State has established health-based cleanup standards for soils, groundwater, air, and surface water. WDOE uses water quality criteria, MCL/MCLGs, background levels, EPA guidelines, and standard State formula for risk assessment. Risk levels of 10^{-5} for total carcinogens, 10^{-6} for individual carcinogens, and Hazard Quotient = 1 for all individual carcinogens are used.

PUBLIC PARTICIPATION

Early planning and development of a site-specific public participation plan is required. The WDOE must establish regional citizens' advisory committees, notify the public of the development of investigation or remedial plans and of the availability of an RI/FS and Cleanup Action Plan, give concurrent public notice of all compliance orders, enforcement orders, and notices of violation. Provisions include public notice and hearings on consent decrees. The Model Toxics Control Act authorizes public participation grants to affected persons or not-for-profit public interest organizations.

ENFORCEMENT

Liability

The Model Toxics Control Act (MTCA) provides for strict, joint and several liability, subpoena authority, site access authority, enforcement order authority, injunctive action, civil penalties (up to $25K/day), cost recovery, and treble damages. Citizen suits and contractor indemnification are also authorized. Private rights of action (contribution claims) are now provided for under the MTCA.

Natural Resource Damages

The State statute authorizes the State to collect natural resource damages. Ecology is the designated natural resources trustee and has 1 FTE assigned to pursuing NRDs under CERCLA/SARA authority. The State has collected approximately $40M as a joint trustee with the Federal trustees and tribes in 3 settlements. Three claims are pending for up to $50M.

Property Transfer

The State has no property transfer provisions.

FEDERAL/STATE PARTNERSHIPS

The State has a SMOA, CPCA, and SSCAs with U.S. EPA.

☆ U.S. GOVERNMENT PRINTING OFFICE 1994 300 574 / 04076